

**MOBILIZATION OF CAPITAL FOR MORTGAGE LOANS  
PORTFOLIO FUNDING AT BANQUE DE  
L'HABITAT DU RWANDA  
(BHR)**

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A Thesis

Presented to the School of  
Postgraduate Studies and Research  
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Kampala, Uganda

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In Partial Fulfillment of the Requirements for the Degree  
Master of Business Administration

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October, 2010



## DECLARATION A


"This thesis is my original work and has not been presented for a Degree or any other academic award in any University or Institution of Learning".

Kevin Vwayez  
Name and Signature of Candidate

Sept 1 October 7th, 2010  
Date

## DECLARATION B

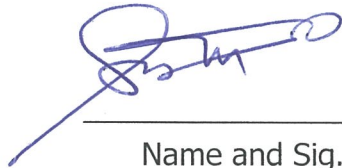
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## APPROVAL SHEET

This thesis entitled" **Mobilization of Capital for Mortgage Loans Portfolio Funding at Banque de l' Habitat du Rwanda (BHR)**" prepared and submitted by Kelvin Uwayezu in partial fulfillment of the requirements for the degree of Master of Business Administration has been examined and approved by the panel on oral examination with a grade of PASSED.



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## **DEDICATION**

This thesis is dedicated with lots of love to: My late beloved mother for her love and care, Agnes and Mercedes for your unfading love, and my brothers and sisters, ERIC above all for your well-timed help during my studies.

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## LIST OF ACRONYMS

**BAD** : Banque Africaine de Développement  
**BCR**: Banque Commerciale du Rwanda  
**BNR**: Banque Nationale du Rwanda  
**BHR**: Banque de l'Habitat du Rwanda  
**CMAC**: Capital Market Advisory Council  
**CSR**: Caisse Sociale du Rwanda  
**EASRA**: East Africa Securities Regulatory Authority  
**HR**: Human Resources  
**ICT**: Information Communication and Technology  
**IFC**: International Finance Corporation  
**KCB**: Kenya Commercial Bank  
**RDB**: Rwanda Development Board  
**Rwf**: Rwanda Franc  
**SPE**: Special Purpose Entity  
**UK**: United Kingdom  
**US**: United States  
**\$**: Dollars  
**%**: Percent

## ABSTRACT

This paper entitled “**Mobilization of Capital for Mortgage Loans Portfolio Financing at Banque de l’Habitat du Rwanda (BHR)**” is a result of research conducted in Rwanda in the above-mentioned bank. The overriding objective of the study was to uncover suited assets-funding tools that bank may embrace in order to raise sufficient loanable funds for the housing sector. Current estimates show dire shortages of housing in Rwanda with supply falling short more than 75 percent of demand.

The study was performed under descriptive research design. Key data were gathered using study of document and questionnaires administered to managers of the bank. Managers targeted were involved in financing, credit administration, and loans recovery and contracts enforcements.

Challenges encountered by banks in mobilization of capital include under-developed capital market, absence of mortgage refinancing window in the country, low income by large number of clients and inadequacy of capital of the bank. The study found the balance sheet of the BHR tiny in reference to highly-priced assets it is expected to finance. Furthermore, sizable sum of loanable funds originated from deposits and proven to be unmatched with long-maturity assets as mortgages.

The study suggested that the bank takes on long maturity, suited asset-liabilities portfolio funding models such as assets-backed bonds, long-term borrowing and further recapitalization in owners’ capital to serve cushion for loss and exposures of the bank. There is also a need to develop secondary market for loans in order to enhance liquidity of banks assets and originate huge loans.

## **CHAPTER ONE**

### **THE PROBLEM AND ITS SCOPE**

#### **Overview**

This chapter is intended to give a detailed background to the study, statement of the problem; the problem the research intended to solve, the purpose of the study, the research questions answered in this study, objectives that the study sought to achieve, the scope in both time and space covered by the study and finally the significance of the study that highlights key beneficiaries of the study and how they benefit.

#### **Background of the Study**

House is a physiological human need. It is like food. So much so even those who cannot afford it still need it. Housing represents a major investment requiring substantial capital outlay. The majority of housing projects, developers whether corporate or households borrow. Though, housing is of great importance, it is a shocking fact that more than a billion of people worldwide still live in poor housing the majority in the urban slums and squatters.

Mortgage funding is very important during housing production because it is necessary to secure sufficient finances to enable a household or corporate business to purchase a plot of land, building materials, labor and any components that lead to housing completion and ownership.

Housing banks have been set up in many countries (1975 in Rwanda) to provide mortgage funding and settle households in decent structures. Thus, a mortgage is the transfer of an interest in property to a lender by the borrower as

a security for a debt usually a loan of money. A mortgage is the standard method by which individuals and businesses purchase real estate without the need to pay the full value immediately from their own resources.

The provision of decent housing attracted the attention of countries since 1970s, particularly the developing world. Housing sector plays a key role in the wellbeing of the citizenry and affects other sectors of the economy. Housing is a durable, consumer item which fulfils the human basic need for shelter and a measure of standard of living across societies (Sanusi, 2003).

Like other developing world countries, Rwanda is facing acute shortage of houses. The demand for housing in Rwanda largely exceeded the supply. Mortgages loans currently finance estimates of 3000 to 4000 housings units annually whereas estimates suggest annual demand of 25000 housings units (Oyier, Ketley & Davis, 2008).

Housing pressures in urban areas will continue to rise in the long term. Urban population growth rates (7%) are above the overall population's growth rate (2%), growth in the urban population averaged to 129,000 per year between 1995 and 2006 (Oyier, Ketley & Davis, 2008).

This study was performed to uncover new ways banks can use to funding their mortgage portfolios. The key assumption made was that by collecting sufficient funds from various sources banks can provide mortgage loans to a large number of people hence alleviate shortages. The study targeted Banque de l'Habitat du Rwanda (BHR) which is the government vehicle set up to mobilize and collect savings to finance housing in Kigali city.

## **Statement of the Problem**

According to Kanimba (2009), the Governor of the National Bank of Rwanda (BNR), the demand for housing in the country is on rise particularly in the urban areas. Based on demographic and urbanisation statistics, it is estimated that 25000 to 30000 houses should be built annually to address the housing demand. The annual supply is however estimated roughly at 2500 houses.

The average price of a residential house in 2008 was 20 Rwf millions. This suggests a financing requirement of up to 500 Rwf billion per year based on the estimate of 25000 house units' demand. However the total assets of all commercial banks which are the leading mortgage lenders were 511 Rwf billion in the same year (Kanimba, 2008).

According to the National Bank of Rwanda (BNR) the overall investment in properties and mortgages of both banking and non banking institutions reached 109, 150,157,470 Rwf billion (2008). Compared to the annual demand of 500 Rwf billion, this supply is roughly 21% of the total demand. Therefore there is an unmet demand of 390, 849,842,530 Rwf billions.

Furthermore, banks capacity to finance long term real estate investment is constrained by maturity duration mismatch. Deposits which are current source funds used by banks are of short term whereas mortgage assets tend to be long term (more than 10 years).

BHR is a housing bank set up by the government of Rwanda in 1975 to provide affordable and decent housing in Kigali (BHR, 2008). Thus, this study was meant determine the challenges of mobilising capital for mortgage portfolio funding at the bank and suggested suitable funding options.



## **Purpose of the Study**

This study was performed to assess challenges face by BHR in mobilising capital for housing loans and find out new suited mortgage portfolio funding tools that may be used by the bank to effectively fund its mortgage portfolio of assets in order to meet its financing demand.

## **Research Objectives**

This study was performed with the followings specific objectives in mind:

- i. To investigate the use deposits to fund mortgage loans portfolio at Banque de l'Habitat du Rwanda.
- ii. To assess key challenges facing Banque de l'Habitat du Rwanda in mobilizing capital for mortgage loans.
- iii. To determine the use of assets securitisation in mobilizing capital for mortgage loans.

## **Research Questions**

To achieve the study goals the following guiding questions were posed:

- i. Do bank deposits constitute effective funding source for mortgage portfolio in a banking institution?
- ii. What are the key challenges facing BHR in mobilizing capital for Housing loans?
- iii. Does the asset securitisation allow banks to effectively finance their mortgage assets?

## **Scope of Study**

The study was performed at the Banque de l'Habitat du Rwanda (BHR). BHR is government sponsored housing bank headquartered in Kigali capital city of Rwanda, situated on the Justice Road. BHR remains a sole specialized housing bank set up in 1975 by the government. The study sought to identify all possible sources of funding in the bank including deposits, securitisation, debts funding and so forth, which in turn determined mortgage loans size, interest rate and loan collaterals. This study covered a time period of 5years starting from 2004 till 2009.

## **Significance of the Study**

This study was very worth undertaking in the sense that its findings are beneficial to a wide number of stakeholders. Nearly 80% of urban residents in Kigali currently live in rented and dilapidated structures. Thus, this study is very vital for them.

This study sought to uncover ways and means mortgage financing would be extended to large numbers of Rwandans both corporate and households. This would enable them to build, own and settle in decent and affordable houses and offices. This would lift the standard of lives in the country.

The study created a platform for improving operations and performance of banking institutions in Rwanda in their endeavours to provide affordable and decent housing to Rwandan residents. This will largely improve investors' wealth and enhance managers' careers.

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The study is beneficial to other stakeholders such as property assessors, lawyers/solicitors and conveyancers, mortgage brokers, law makers and city planners in their respective areas owing to linkages to mortgage financing.

The study finally prepared the ground for further researchers in the areas of mortgage financing, property development, bank management and other connected fields. Hence, this thesis shall be used as an important reference by other researchers.

## CHAPTER TWO

### REVIEW OF RELATED LITERATURE

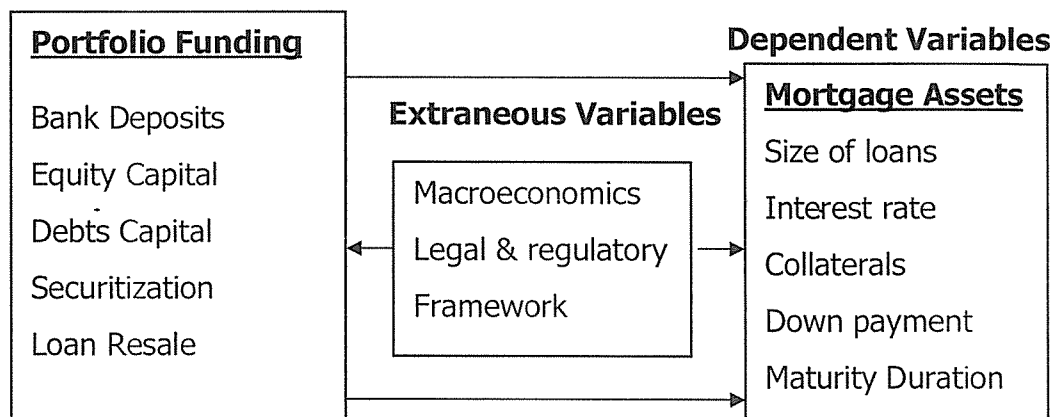
#### Overview

This section is intended to give detailed literature and theories underpinning this study. It started with a brief review of related studies performed in several countries and their findings. The section also re-examined mortgage funding tools suggested by various authors including deposits and non-deposits based funding, owner's capital funding and the latest vehicles such as assets-backed funding models.

#### Conceptual Framework

**Figure 2.1 Conceptual Framework**

##### Independent Variables



**Source: Hudgins and Rose Models (2008).**

Perhaps, the most important role played by banks in the economy is shifting of funds from surplus holders to those in deficit, hence creating investment/consumption and allowing economy to thrive. This process is called

intermediation. Similarly, to finance the mortgage assets, banks collect funds from those holding surplus and make loans to those in deficit who need financing to build/purchase houses.

The above figure displays, several funding models or combinations of models used by banks to attract savings for mortgage portfolio funding. The first funding tool is deposits under which bank collects deposits and savings to finance housing; the borrower deposits a sum of money in his/her demand or time deposit account which the bank uses to make mortgage loans.

Mortgage funding sources include also debts and equity funding obtained on capital markets. This is achieved by floating securities on the capital markets. The proceeds recouped by banks from the sales of these instruments are in turn used to finance its mortgage portfolio. Similarly, bank can decide to take out long term debt from other institutions and use this money to make mortgage loans.

The latest mortgage portfolio funding vehicles to usher in 1970s are securitization of mortgage loans and loan sales (Hudgins & Rose, 2008). Securitization is funding model whereby the lending institution sets aside a group of income earning assets and sell securities against these assets in the open market. This offers huge advantages in raising funds and reducing risk exposures. Sale of loan on the other hand consists of selling off existing loans to originate new and gain service fee. Loan sale tremendously enhance liquidity of bank assets.

Banks ability to raise capital and make loans is largely affected by various factors including macroeconomic factors as inflation, regulations by the central banks and capital markets authorities, credit controls system, laws governing mortgage registrations, foreclosures and contracts.

## **Related Studies**

Housing financing is very important issue, but surprisingly very few studies were conducted and published in Rwanda under this topic. However, many studies have been published elsewhere in the world. Important references on housing comprise the study of Bestani and Klein (2006) on housing in Asia, Nabutola (2004) on affordable housing experience from Kenya, Kecia (2008) on housing finance in Africa, Warnock (2007) study on market and housing finance, World Bank study (2006) entitled making finance work for the poor and another study entitled financing homes (2008), and Gadanez (2004) on syndicated loan markets/ structure, developments and implications. Further important references included Nasarre-Aznar (2002) funding of the mortgage loans in Spain by the issues of mortgage securities and standard & Poors, (2005) Europe's whole loan sale burgeoning as mortgage credit market comes of age.

The marvelous study conducted in Rwanda on housing was by (Oyier, Ketley and Davis, 2008) and another study by a team of Paul Murgatroyd, James Dry, Tom Power and William Postgate (2007) on Rwanda financial sector development program. There are also plenty materials on internet, workshop reports including Wharton University of Pennsylvania , USA & Wits Business school, South Africa, (2008). Further internet materials have recently included also mortgage interest calculators.

The above researchers seem all to be converging on the root causes of under developed housing finance markets. The majority of them found that major hurdles for housing financing were under-developed capital markets and banking systems in many countries that obstructed banks from selling mortgage securities (Bestani& Klein, 2006).

Legal and regulatory frameworks in various countries have stifled mortgage financing. Laws on mortgage foreclosure are very frustrating in some countries coupled with unclear titling process, poor registration and unenforceable contracts laws. These issues have pushed higher both interest rate, risk and cost of mortgage ( Bestani & Klein 2006, Rust, 2008, Nabutola, 2007, Oyier, Ketley and Davis, 2008). The study of World Bank (2008) shows that mortgage registrations may take even a year in Rwanda against 4days in New Zealand.

Further, Rust (2008) shows how lacks of secondary market facility including credit rating bureaus, loan resale market and securitization have also fiercely hampered the development of mortgage financing markets. Nabutola (2007) clearly demonstrates the experience of Kenya where the low income earners have been shut out of formal mortgage financing market due to higher interest, short term maturity lending, high down payments, stable and regular income requirements and so forth.

## **Mortgage Portfolio Funding**

### **Deposit Based Mortgage Funding**

According to Saunders & Cornet (2008) deposit funds are number one source of funds at most banks. Deposits are key elements in defining what a banking firm really does and what critical role is really playing in the economy. Deposits provide much of the raw materials for making loans and thus may represent the ultimate source of profit and growth for a banking firm.

Hudgins & Rose (2008) divide deposits into three categories namely **Saving Deposits**- These are deposits on which banks pay small interest to

depositors who are usually small savers and depositors are allowed to withdraw their money up to a limited amount during a day, week or a year.

**Demand Deposit** – Depositors keep their deposits in current account where they can withdraw any amount standing in with cheque without prior notice to the bank. The bank does not pay any interest on such account but instead charges a small sum for services rendered to its customer and that is why current accounts are also called transaction deposits.

**Fixed or Time Deposits-** Savers who do not need money for a stipulated period of time are encouraged to keep their monies in fixed deposits accounts. The bank pays a higher interest on such deposits and the rate of interest increases with the rate of increase in time of deposits.

Deposits are short term and if this is the only source of funds housing loans will tend to be short term or at variable rates. Given that housing is expensive, short-term loans are unattractive to potential borrowers. Potential borrowers might find variable rate loans attractive, but will likely not be able to gauge the substantial interest rate risk they are bearing. In addition, a reliance on deposits implies that funding sources are limited geographically, which increases risk (Warnock Veronica & Warnock Francis, 2007).

Given the fact that housing represents a substantial sum of investment to a household or corporate business which ought to be amortized in long- period of time, sell short-term mortgage would not be attractive to mortgage borrowers. Additionally, using deposits to grant long term mortgage create durations mismatch in the assets-liabilities causing greater liquidity exposure in the portfolio. Thus, deposits particularly demand deposits are unsuitable for bank mortgage portfolio funding (Roy, 2008).



However, deposits remain an important source of funds for mortgage lenders due to its lower cost in comparison to other sources of funding. Mennill (2010) affirms that 60% of mortgage originated in Canada is funded by deposits.

### **Owner Capital Funding**

Raising sufficient capital and retaining enough capital to protect the interests of customers, employees, owners and the general public is one of the great challenges in management of a financial service provider. For bankers and many of their competitors, the word capital has a special meaning. It refers principally to funds contributed by the owners of the financial firm. In this case, this means the stockholder-investors in the common and preferred stock that a financial firm has issued (Rose &Hudgins, 2008).

According to Saunders & Cornett (2008), regulators require banks to hold a minimum levels of capital to act as buffer against losses from bank's on and off-balance sheet activities. Because of the relative low cost of deposits compared to owners' capital, banks tend to hold equity close to their minimum level set by regulators.

Hudgins & Rose (2008) outline several roles played by capital in supporting the daily operations and ensuring the long-run viability of the financial firm: In the first place capital provides a cushion against the risk of failure by absorbing financial and operating losses until management can address the institution's problems and restore its profitability.

Capital promotes public confidence and reassures creditors concerning the institution's financial strength. Capital must also be strong enough to reassure borrower that lending institution will be able to meet their credits needs even if the economy turns down.

Capital provides the fund needed to charter, organize and operate a financial firm before other sources of funds come flowing in a new institution needs start-up funding to acquire land, build, or lease facilities, purchase equipments and hire offices and staff even before opening day.

Capital provides funds for organization's growth and the development of the new services and facilities. Most financial services providers eventual outgrow the facilities they started with. An infusion of additional capital will permit financial firm to expand into large quarters or build additional branch offices in order to keep pace with its expanding market and follow its customers.

Capital serves as a regulator of growth, helping to ensure that growth is sustainable in the long-run. Both regulators and financial markets authorities require that capital increases roughly in line with the growth of risk assets. Thus the cushion to absorb losses is supposed to increase along with financial institution's growing risk exposure.

In short, capital is constituted to serve as cushion against the financial firm failure. When all else fails, it is the owner's capitals (net worth) that forms the ultimate defense against risk. Owner's capital absorbs losses from bad loans, poor securities investments, crimes and management misjudgment so that financial firm can keep operating until its problems are corrected and losses are recovered. Thus the greater the risk, from whatever source, the more capital a financial institution should hold (Hudgins & Rose, 2008).

### **Basel Agreements on International Capital Standards**

In 1988, the Federal Reserve Board representing the US, and representatives of other leading countries (including Belgium, Canada, France, UK, German, Italy, Japan, Spain, Netherlands, Switzerland, Sweden, and

Luxembourg) announced an agreement on new capital standards usually referred to as Basel Agreement for the city in Switzerland where this agreement was reached (Rose &Hudgins, 2008).

According to Bank for International Settlements (2001), the original Basel capital standards are known as Basel I. under the terms of Basel I the various sources of capital are divided into two tiers: Tier I (core) Capital – includes common stock, and surplus, undivided profits (retained earnings), qualifying non- cumulative perpetual preferred stock, minority interest in equity accounts of consolidated subsidiaries and select identifiable intangible assets less goodwill and other intangible assets.

Tier II (supplemental) Capital- includes the allowances (reserve) for loans and lease losses, subordinated debts capital instruments, mandatory convertible debts, intermediate term preferred stock, cumulative perpetual preferred stock with unpaid dividends, and equity notes and other long term capital instruments that combine both debt and equity features (BIS, 2001).

To determine each bank's regulatory capital, regulators must deduct from the sum of Tier I and Tier II several additional items including investments in unconsolidated subsidiaries, capital securities held by bank that were issued by other depository institutions and are held under reciprocity agreement, activities pursued by savings and loans associations that may have been acquired by a banking organization but are not permissible for national banks, and any other deductions that the regulatory supervision may demand.

Basel I. Stipulated that for a bank to qualify as adequately capitalized its must have a ratio of core capital (Tier I) to total risk-weighted assets of at least 4percent and a ratio of total capital (the sum of Tier I and Tier II capital) to total

risk-weighted assets of at least 8 percent with the amount of Tier II capital limited to 100 percent of Tier I capital (BIS, 2001).

### **Credit Risk Adjusted Assets**

Under Basle II capital adequacy rules, risk-adjusted assets represent the denominator of the risk-based ratio. Two components make up credit risk-adjusted assets namely credit risk adjusted on balance sheet assets and credit risk adjusted off-balance sheet.

According to Saunders & Cornett (2008) to be adequately capitalized a bank must hold a minimum ratio of total capital (Tier I capital plus Tier II supplementary capital) to credit risk adjusted assets of 8 percent that is, its total risk-based capital ratio.

$$\text{Total risk-based capital ratio} = \frac{\text{Total Capital (Tier I + Tier II)}}{\text{Credit risk Adjusted assets}} \geq 8\%$$

In addition, the Tier I core capital components of total capital has its minimum guideline. The Tier I (core) is calculated as:

$$\text{Tier I (core) capital ratio} = \frac{\text{Core capital (Tier)}}{\text{Credit adjusted risk-assets}} \geq 4\%$$

In addition to their use to define adequately capitalized banks, risk-based capital ratios along with traditional leverage ratio- also define well capitalized, undercapitalized, significantly undercapitalized and critically undercapitalized banks as part of the prompt corrective action program.

### **Credit Risk-Adjusted Off-Balance Sheet Activities**

The credit risk-adjusted value of on-balance sheet assets is only one component of the capital ratio denominator; the other is the credit-risk adjusted value of the bank's off-balance-sheet (OBS) activities. These OBS activities represent contingent rather than actual claims against depository institutions. Thus, regulations require that capital be held not against the full face value of

these items, but against an amount equivalent to any eventual on balance sheet credit risk these securities might create on depository institutions (Saunders & Cornett, 2008).

In calculating the credit risk adjusted values of these OBS items we must first convert them into credit equivalent amount –amounts equivalent to an on-balance sheet. Furthermore the calculation of the credit risk-adjusted values of the off-balance activities involves some initial segregation of these activities. In particular, the calculation of credit risk exposure or credit adjusted assets amounts of contingent or guaranty contracts such as letter of credit differs from the calculation of credit risk adjusted assets amounts for foreign exchange and interest rate forward, option and swap contract (Rose & Peter, 2008).

Under the risk based capital ratio rules, the credit or default risk of exchange traded derivatives is approximately zero because when counterparty defaults on its obligations, the exchange itself adopts the counterparty's obligations in full. However, no such guarantees exist for bilateral agreed, over-the-counter contracts originated and traded outside exchange. Hence, most OBS futures and options positions have no capital requirements for a bank while forwards, swap, caps and floors do (Saunders & Cornett, 2008).

## **Securitization of Mortgage Loans**

According Rose & Hudgins (2008) the asset securitisation reached more than \$6 trillion in 2005 from just under \$4 trillion five years early. Securitisation of loan and other assets is a simple idea for raising new funds and reducing the risk exposure. So simple, in fact that one wonders why it was not fully developed until 1970s and 1980s.

The comptroller of the Currency (1997) defines asset securitization as the structured process whereby interests in loans and other receivables are packaged, underwritten, and sold in the form of "asset backed" securities. From the perspective of credit originators, this market enables them to transfer some of the risks of ownership to parties more willing or able to manage them. By doing so, originators can access the funding markets at debt ratings higher than their overall corporate ratings, which generally gives them access to broader funding sources at more favorable rates.

By removing the assets and supporting debt from their balance sheets, they are able to save some of the costs of on-balance-sheet financing and manage potential asset-liability mismatches and credit concentrations. Securitising assets requires the lending institution to set aside a group of income earning assets such as home mortgage and to sell securities against these assets in the open market. As the assets pay out for example the borrowing customers repay the principal and interest owed on the loans, that income flow to the holders of securities. In effect, loans are converted into publicly traded securities.

Asset securitization began with the structured financing of mortgage pools in the 1970s. For decades before that, banks were essentially portfolio lenders; they held loans until they matured or were paid off. These loans were funded principally by deposits, and sometimes by debt, which was a direct obligation of the bank rather than a claim on specific assets (comptroller of Currency, 1997).

But after World War II, depository institutions simply could not keep pace with the rising demand for housing credit. Banks, as well as other financial intermediaries sensing a market opportunity, sought ways of increasing the sources of mortgage funding. To attract investors, investment bankers eventually developed an investment vehicle that isolated defined mortgage pools, segmented the credit risk, and structured the cash flows from the underlying

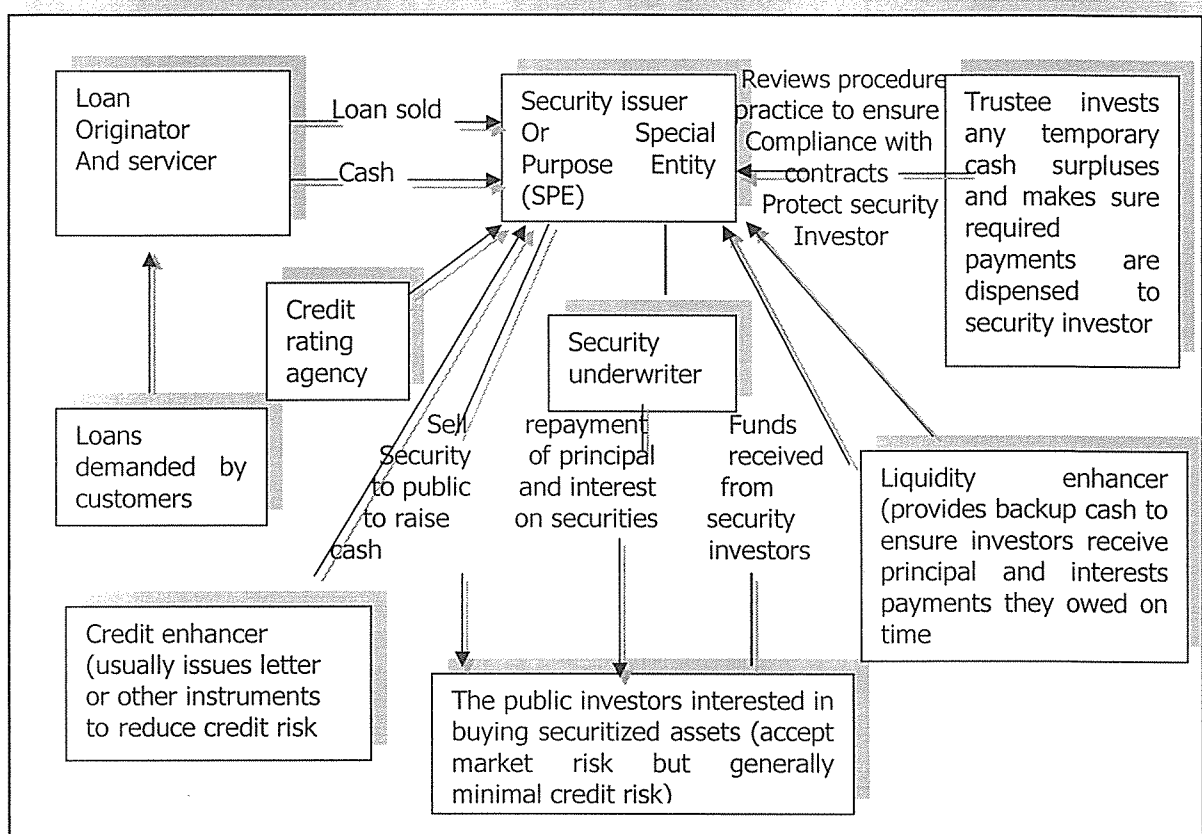
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loans. Although it took several years to develop efficient mortgage securitization structures, loan originators quickly realized the process was readily transferable to other types of loans as well.

Since the mid 1980s, better technology and more sophisticated investors have combined to make asset securitization one of the fastest growing activities in the capital markets. The growth rate of nearly every type of securitized asset has been remarkable, as have been the increase in the types of companies using securitization and the expansion of the investor base (Rose & Peter, 2008).

The securitisation is using the securities markets to fund a portion of the lender's loans portfolio, allocate capital more efficiently, diversify funds sources and lower the cost of fund raising. The bank or other lenders whose assets are securitized is called originator and those loans are passed to an issuer who is usually designated a Special Purpose Entity (SPE). This process (securitisation) is clearly explained using the following drawing:

**Figure 2.2: Players in Loans Securitization**



**Source: Rose & Hudgins (2008)**

The SPE is completely separate from the originator to help insure that, if originating lender goes bankrupt, this will not affect the credit status of the pooled loans, making the pool and its cash flow bankruptcy remote. A credit rating agency rates security to be sold so that investors have a better idea over what new securities are likely to be worth. The issuer then sells securities in money and capital market often with the aid of underwriter (investment bank).

A trustee is appointed to ensure that the issuer fulfils all the requirements of the transfer of loans to the pool and provide all services promised to investors. A servicer (who is often the loan originator) collects payments on securitised



loans and passes them to the trustee who ultimately makes sure those investors who holds securities receive the proper payments.

Investors in the securities normally receive the assurance that they will be repaid in the form of guarantee against default issued by a liquidity enhancer and guarantees against run short of cash issued by liquidity enhancers. Liquidity enhancers may internal such as cash reserve to cover loan default or external in the form of letters of credits or credit swap. These enhancements raise the credit rating of the securitisation transactions beyond the attached to the underlying assets.

Pooling loans through securitisation helps to diversify a lender's credit exposure and reduces the need to monitor such individual payments stream. Securitisation creates liquid assets out of what is often illiquid, expensive to sell assets and transform them into new sources of funds for lenders and attractive investment for investors in capital market. The lender secures also additional earning based on the spread between the interest rate being earned on securitised assets and the interest rate paid to securities holders which are usually lower.

The growth in securitisation is not surprising given benefits it offers to major parties involved. For Originators securitization improves returns on capital by converting an on-balance-sheet lending business into an off-balance-sheet fee income stream that is less capital intensive. Depending on the type of structure used, securitization may also lower borrowing costs, release additional capital for expansion or reinvestments purposes, and improve asset/liability and credit risk management.

For Investors securitized assets offer a combination of attractive yields (compared with other instruments of similar quality), increasing secondary

market liquidity, and generally more protection by way of collateral overages and/or guarantees by entities with high and stable credit ratings. Most important, structural credit enhancements and diversified asset pools free investors of the need to obtain a detailed understanding of the underlying loans.

Borrowers benefit from the increasing availability of credit on terms that lenders may not have provided had they kept the loans on their balance sheets. For example, because a market exists for mortgage-backed securities, lenders can now extend fixed rate debt, which many consumers prefer over variable rate debt, without overexposing themselves to interest rate risk.

### **Debt Based Mortgage Funding**

The traditional source of funds for depository institutions is the deposits sold to individuals, households and business. Thus, the public supply of deposits constitutes much of the raw materials for lending, and investing and ultimately, for the profits these institutions earn. But what does management do to find new money when volume deposits do not suffice to support all loans and investments these institutions would like to make?

Managers of banks are well informed of the loss involved when they turn down a profitable loan request with the excuse "we do not have enough deposits or other funds sources to support the loan". Hence banks introduced the strategy known as liability management. This consists of buying funds, mainly from other financial institutions in order to cover good-quality credit request and satisfy any legal reserve requirement on deposits and other borrowing that law or any regulation may require (Rose &Hudgins, 2008).

## **Alternative Debt Sources of Funds**

While small banks and thrift institutions usually rely most heavily on deposits for their funding needs, leading depository institutions around the globe have come to regard the non deposits funds market as a key source of short-term money to meet both loan demand and unexpected cash emergencies.

The most non deposits funds sources that financial firms use today include namely negotiable certificate of deposits, fed funds borrowing, commercial papers, repurchase agreements, corporate bonds, term loans from other Institutions etc.

Bulk of the above non deposits funds described in the table is mainly short term borrowing. The loans involved range from hours to days occasionally stretching into weeks or months with term Fed contracts, commercial papers and similar funding instruments. However, many financial firms also tap long term non deposits funds stretching well beyond one year such as mortgage issued to finance housing (Rose & Peter, 2008).

## **Mortgage -Backed Bonds**

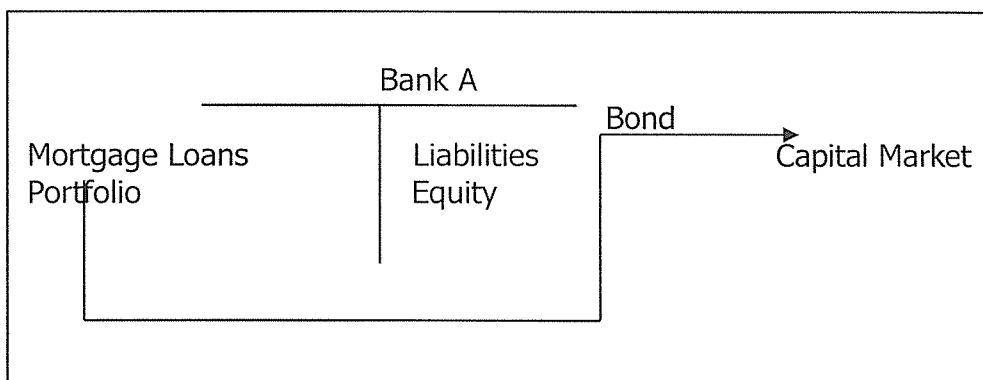
An alternative to selling their mortgage outright in the secondary market, financial institutions can issues mortgage backed securities which are securities backed by mortgage loans. Mortgage backed come in various forms; the most common are mortgage pass through securities. A group of mortgage held by a trustee of the issuing institutions serves as collaterals for these securities (Madura, 2003).

The interest and the principal payment are sent to the financial institutions which then transfers (passes through) the payment of the owners of the mortgage backed securities after deducting fee for servicing and for guaranteeing payments to the owners. This process allows the savings

institutions and banks that originate mortgage to adjust their balance sheets. Thus, they can earn fee from servicing the mortgage while avoiding exposures.

Financial institution can reduce its exposure to interest rate risk by issuing pass-through securities because the payments received from mortgage are tied to the payments sent to the security owners. To the extent that financial institutions use pass-through securities to finance mortgage holding, they can insulate their profits margin from interest rate fluctuation. This process is captured properly in the following drawing.

**Figure 2.3: Mortgage Backed Bonds**



**Source: Roy, 2003**

### **Mortgage Loans Sales**

Not only loans can be sold as collaterals for issuing securities to raise new funds, but the loans themselves can be sold in their entirety. Under loan sale, the bank originates and services the loan for few years and then sells it to the buyer. Widely loan buyer comprised insurance companies, pension funds, mutual funds, hedge funds, security dealers (Madura, 2003). The loan debtor

Under the sales of loans, generally the sellers retain the servicing rights on the loans, enabling the selling institution to generate fee income by collecting interests and principal payments from the borrower and passing it along to the loan buyer. Servicing institution also monitors the performance of the borrower and acts on the behalf of the buyer to make sure that borrowers are adhering to terms of the loans.

Loan sale differs from securitization. Loan sale involves the sale of participation or the totality of originated loans and is usually effected without recourse hence removing credit risk from the originator's balance sheet. On the other hand, securitization involves pooling assets and sell securities hence transforming them into liquid and tradable one. Moreover, securitization involves enhanced credit and augmented collaterals or some forms of recourse.

Standard & Poors (2005) provides a comparison of these two mortgage portfolio funding models in the following table:

**Table 2.1 Comparison Loan Sale and Securitization**

<b>Whole Loan Sale</b>	<b>Securitization</b>
Profit upfront	Profit over time
Cross selling opportunities	Potential to create instruments by selling these profit over time
Asset clearly removed from balance sheet for accounting purpose	Securitized assets to be recognized on balance sheet
Additional diversifier of funding	Widely used & understood funding
Additional form of liquidity/different profit	Continues to be very strong form of liquidity/benchmark
Economic option for small pool	Offers economy of scale/ability to issue large quantity of debt
Ability to buy exact volume of specific loan	Ability to structure risk thru tranching

**Source: Standards & Poors (2005).**

In some instances, the seller will agree to give the loan repurchase or recourse to the buyer for all or a proportion of the sold loans that become delinquent. In effect, the purchaser gets put options, allowing him or her to sell a troubled loan back to its originator.

## **Syndicated Mortgage Loans**

In a syndicated loan, two or more banks agree jointly to make a loan to a borrower. Every syndicate member has a separate claim on the debtor, although there is a single loan agreement contract. With syndicated mortgage loan, each member of the syndication group is a lender to the borrower and each lender's individual loan is secured by a mortgage granted to a collateral agent representing all of the lenders (Sandrige & Rice, 2008).

The syndicated industry comparatively minuscule before the early 1970s grew explosively after the oil crisis 1973. As petroleum prices soared, banks amassed deposits from oil exporting countries and funneled them out in syndicated loan to oil importing countries while that scenario eventually faded syndicated loans picked up again in US in 1980s with the rise of leverage buyout (DTCC, 2008).

Depository Trust and Clearing Corporation reports (2008) further shows the global syndicated loan market totaling more than \$4 trillion in 2007, an increase of 13% over 2006 and 32% over 2005. The largest market was US with \$2.1trillion in loan activity with an increase of more than 20% over 2006. The second largest market was UK with \$376.3 billion in syndicated lending. However, though UK and US holds a lion share in this market, there are also growing small markets in Latin America, Africa and Asia.

Syndicated lending involves dividing a loan among many lenders, a strategy that allows lenders to share risk and borrowers to have access to multiple sources of funding. Syndicated lending can include a handful of lenders or as few as two but typically has a dozen of participants. Most syndicated loans originate at banks though institutional investors including pensions fund, hedge funds, mutual funds and insurance companies are becoming increasingly involved in syndicated loans.

The creditors can be divided into two groups. The first group consists of the senior syndicate member and is led by one or several lenders, typically acting as mandated arrangers, arrangers, lead managers or agents. These senior banks are appointed by the borrower to bring together the syndicate of banks prepared to lend money at the terms specified by the loans. The syndicate is formed around the arrangers often the borrower's relationship banks who retains a proportion of the loan and search junior participants (Gadanez,2004).

The junior banks, typically bearing manager or participant titles, form the second group of creditors. Their number and identity may vary according to the size, complexity and pricing of the loans as well as the willingness of the borrower to increase the range of its banking relations

Senior banks may have several reasons for arranging syndication. It can be a means of avoiding excessive single-name exposure, in compliance with regulatory limits on risk concentration, while maintaining a relationship with the borrower. Or it can be a means to earn fee, which helps diversify their income. In essence, arranging a syndicated loan allows them (senior banks) to meet borrower's demand for loan commitments without having to bear the market and credit risk alone (Gadanez, 2004).

For junior banks, participating in a syndicated loan may be advantageous for several reasons. These banks may be motivated by lack of origination capability in certain types of transactions, geographical areas or industrial sectors or indeed a desire to cut down on originations costs.

While junior participating banks earn just a margin and no fee, they may also hope that in return for their involvements, the client will reward them later with more profitable business, such as treasury management, corporate finance or advisory work.



## **CHAPTER THREE**

### **METHODOLOGY**

#### **Overview**

This chapter covered the methodology used to carry out this study. The chapter started with the research design used, the population targeted, sampling procedures used to derive the sample, research devices used to gather the required data and how the data gathered were analyzed.

#### **Research Design**

This study was performed through a descriptive research design. Descriptive research collects detailed information about a given subject and uses it in order to address a specific research problem. Case study design helps to intensively study, describe and explain a single entity in depth in order to gain insight into larger cases.

Thus, the researcher selected the case study of BHR which was used to gather information, and analyze it and explain the issues of mortgage portfolio funding within banks. The findings of this case study are generalisable and may be replicated in other banks.

#### **Study Population**

The study was carried out at the Banque de l'Habitat du Rwanda (BHR). Hence, the study population constituted of the present staff of the bank. This staff comprises of top managers, heads of various departments and employees who are currently involved in the management of this bank. The total number of staff making the study population was precisely 42 employees dispersed in various departments.

## **Sampling Design and Procedures**

To derive the sample from the total population of 42 employees, random sampling approach was used. By the use of Sloven's sampling model the sample size of 38 was obtained from the population as follows:

$$n = \frac{N}{1 + N(e)^2}$$

Where n= Sample Size

N= Population

e= Error Margin of 5%

Hence, Sample Size  $n = \frac{42}{1 + 42(0.05)^2} = 38$

## **Data Collection**

In a bid to enhance the reliability of the findings, triangulation in the data collection tools was used. Thus, the major data collection tools used in this study are namely, questionnaire and study of the documents. The choice of these tools was guided by the data required and the objectives of the study.

## **Questionnaire**

Meant for literate only, the questionnaire is a set of related questions designed to obtain written information about a specific subject from the respondents. A questionnaire may be delivered to a home or place of work by the researcher or it may be sent to respondents via email (Wangusa, 2007).

The questionnaire had both open and closed ended questions. The open ended questions solicited respondents to fill in their own opinions while the closed ended ones required them to mark off the most suitable alternative.

## **Study of Documents**

This tool was greatly used to collect data. The data collected through this tool included credit policies, financial reports (balance sheets and income statements), figures on loan granted, proceeds from various sources of funding,

terms and conditions applied on loans, management reports, minutes of board etc. Thus, these data added up to the information gathered through questionnaires. They were tabulated, summed and categorized yearly for better analysis.

## **Research Procedure**

The beginning of the field activities was marked by the approval of the research proposal by the university. Thereafter, the researcher secured the permits and the letters of introduction from the School of Postgraduate. The researcher then proceeded with field work to collect data. The data collection was effected by the use of questionnaire and study of documents officially obtained from the banks authorities. The data generated was then analysed. Descriptive statistic was necessarily used at this stage to compute the frequencies and percentages, present figures into tables and plot charts.

## **Data Analysis**

The data gathered were in two forms; namely the responses and views of respondents from questionnaire. These data are in likert forms and the analysis used was descriptive statistic. This consisted of computation frequencies and percentage weights of agree and disagree answers.

Another set of data were gathered through study document. These data comprised of financial reports of the bank showing amounts of loans, deposits, and other sources of funds. They were presented in table and charts to track the trend since the financial year 2005 to 2009.

## **Ethical Consideration**

To carry out this study, the researcher liaised with both individuals and institutions. Thus, the data collected had to be kept confidential and were exclusively used for academic purpose. The respondents were informed of the contents and the aims of the research prior to administration of any instrument. This research was fully conducted ethically and all copyrights have been observed and where permission was required to reproduce materials were sought from the owners.

## CHAPTER FOUR

### PRESENTATION, ANALYSIS AND INTERPRETATION OF DATA

#### Overview

This section presented key findings of the study, and interpretation of the data gathered during field works. The data presented herein the chapter are in form of views expressed by the staff of Banque de l'Habitat du Rwanda (BHR) tallied in tables and key financial data obtained from the bank in various form (paper based, electronic, and oral).

#### Capital Structure of the Bank

Over the last 5 years (2005-2009), the funding structure of the bank has exhibited three major sources of funding. They comprised mainly of deposits funds, owners' equity and the loans secured from the governments of Rwanda. The following tables show the weights of each source in the funding structure.

**Table 4.1: Funding Structure**

<b>Sources of Funds (000 Rwf)</b>					
	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>
Deposits	1,071,916	2,520,282	3,715,493	4,154,221	2,882,404
Liabilities	9,033,853	8,933,358	11,184,875	3,642,879	3,366,852
Net Worth	1,490,292	1,536,887	1,779,127	7,136,107	7,592,625
Total Fund	11,596,061	12,990,527	16,679,495	14,933,207	13,841,881

**Source: Secondary Data**

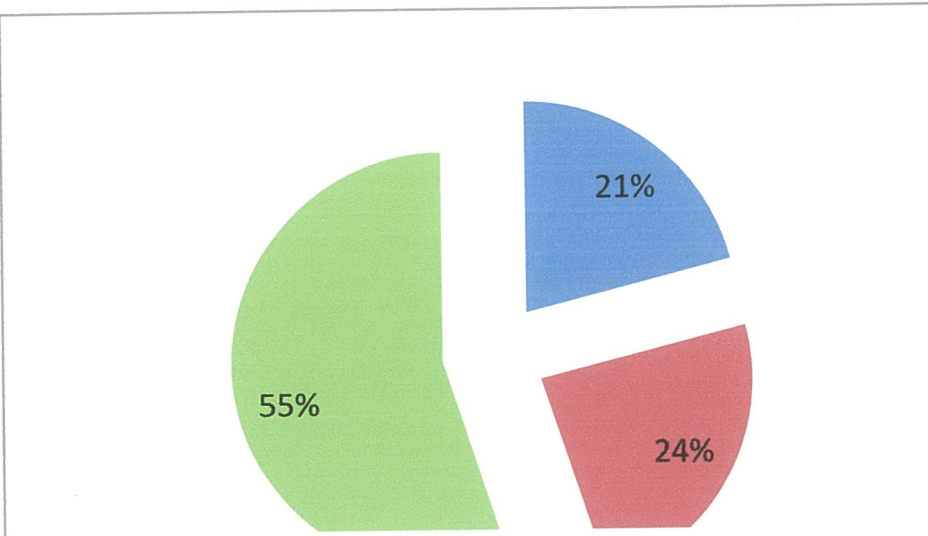
**Table 4.2: Capital Structure**

	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>
Deposits	9%	19%	22%	28%	21%
Liabilities	78	69%	67%	24%	24%
Neth Worth	13%	12%	11%	48%	55%
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

**Source: Secondary Data**

There was continued increase in the share of deposits and equity capital in the bank’s funding structure. Deposits proportion in total funding continued to increase from 9% ( 2005) to 28% (2008) before plunging to 21 (2009). Similarly, shareholders continued to capitalize the bank; increasing the proportion of net worth in total capital from 13% (2005) to 55% in 2009. However, liabilities were written down from 78% (2005) of the total funding to 24% (2009).

**Figure 4.1: Capital Structure 2009**



**Source: Secondary Data**

**Trend in the Deposits**

Deposits represent a paramount source for loanable funds of BHR. Positive trend was registered in deposits base during the past five years as depicted in the table and chart below.

**Table 4.3: Growth in Deposits**

Item	2005	2006	2007	2008	2009
Deposits (000Rwf)	1,071,916	2,520,282	3,715,493	4,154,221	2,882,404
Growth Rate	-	135.1%	47.4%	11.8%	-30.6%

**Source: Secondary Data**

The drop (30%) in deposits base (2009) was attributed to the global recession that severely hit financial institutions worldwide. The surge (deposits) observed in the previous years was triggered by lots deposits received in forms of the downpayments for reservations of houses that were under constructions in Gacurilo project which also closed down in 2009.

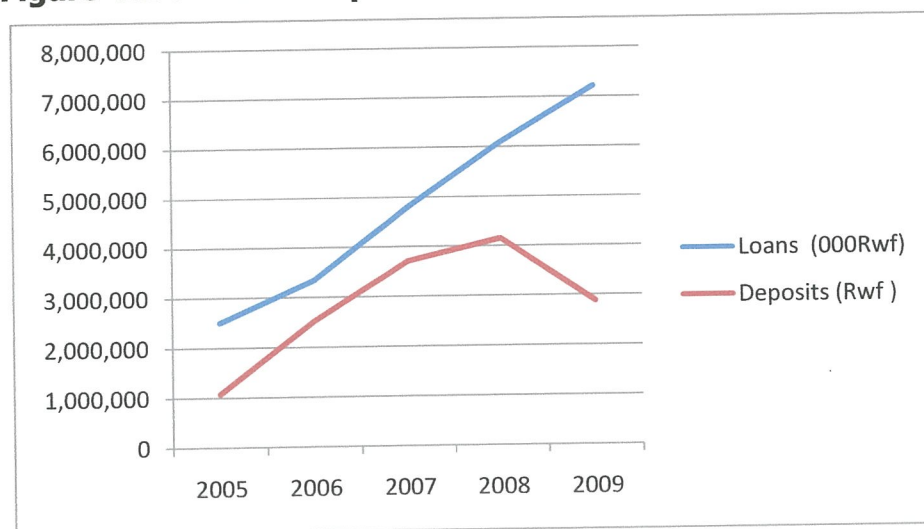
**Table 4.4: Composition of Deposits**

	2006	2007	2008	2009
Demand Deposit	48%	45%	56%	52%
Saving Deposits	52%	55%	44%	48%
Total Deposits	100%	100%	100%	100%

**Source: Secondary Data**

Both demand and housing deposits are sources of mortgage funding used by BHR. However, though demand deposits have increase 56% (2008), 52 % (2009) of total deposits, they represent a highly unsuited source of funding for long term loans and are little used by prudent commercial banks for this purpose.

**Figure 4.2 Trend in Deposits and Loans**



**Source: Secondary Data**

Unlike deposits, debts have been declining on the balance sheet of the bank during the last five years. The following table depicts this decline properly.

**Table 4.5: Decline in Debts**

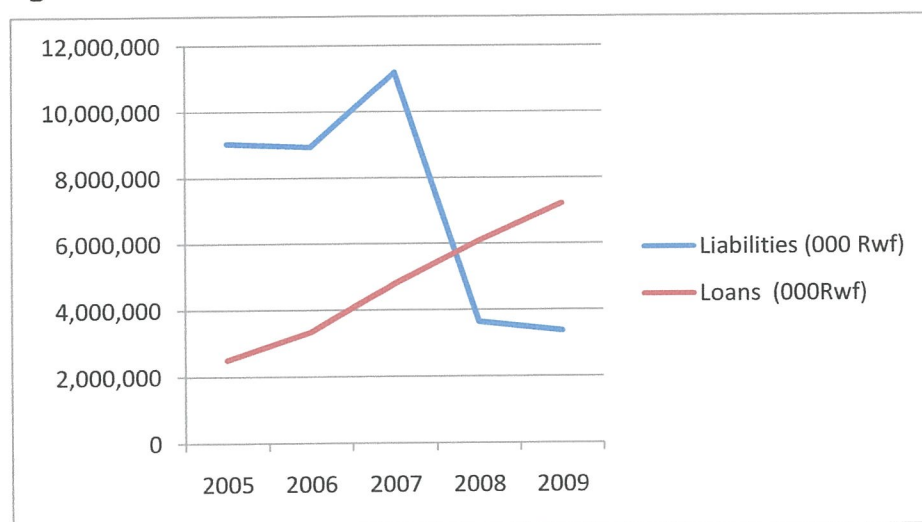
Item	2005	2006	2007	2008	2009
Liabilities (000 Rwf)	9,033,853	8,933,358	11,184,875	3,642,879	3,366,852
Trend (%)	-	1.1%	25%	-67.4%	-7.5.85%

**Source: Secondary Data**

The above table shows increase in the debts financing of the bank in 2006 (13%), and 30% in 2007 before shrinking (-67.67%) in 2008 and (-19.85%) in 2009 from the previous year.



**Figure 4.3 Trend in Debt and Loans**



**Source: Secondary Data**

The notes appended on the audited financial statements explain further that larger amount in the liabilities of the bank was owed to the government. However, these debts originated from the houses formerly owned by the government which the later had decided to sell off through BHR. Government also put funds in special window to guarantee civil servants borrowing.

### **Trend in Equity Capital**

Unlike any other subset of the liabilities side, equity capital maintained a steady growth over the last five years. The table below depicts this increase properly.

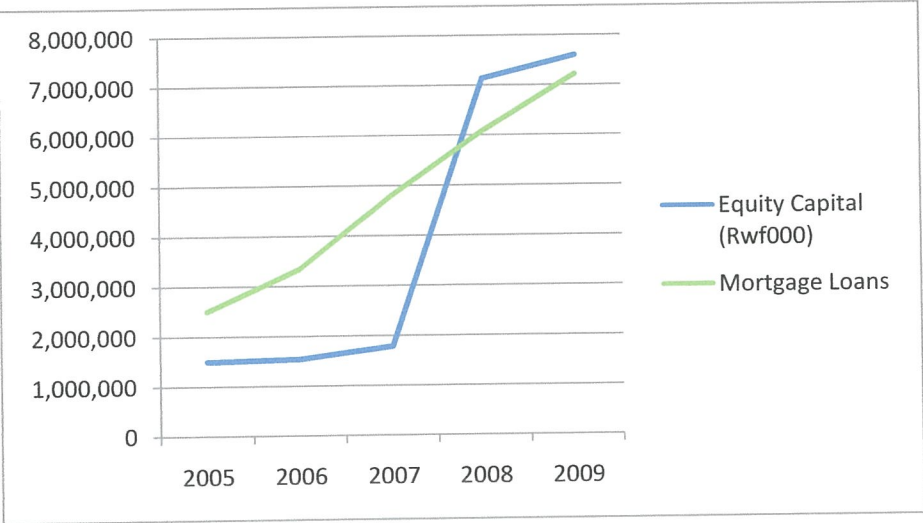
**Table 4.6: Growth in Equity Capital**

Item	2005	2006	2007	2008	2009
Equity Capital (Rwf000)	1,490,292	1,536,887	1,779,127	7,136,107	7,592,625
Trend (%)	-	3.12	15.76	301.1	6.3

**Source: Secondary Data**

There have been continued growth in equity capital since 2005. The growth in 2006 was (3%), 15% in 2007 and skyrocketed to its highest (301.1%) in 2008 and 6.3% in 2009.

**Figure 4.4 Trend in Equity Capital and Loans**



**Source: Secondary Data**

Large increases (2008) in equity capital were effected following orders from the National Bank of Rwanda (BNR). These orders were intended to align commercial banks capital with the weighted risk of their assets. Hence, Banque de l’Habit du Rwanda (BHR) saw its capital adequacy ratio highly appreciating from 25% (2005) to 74% (2009). This capital adequacy is far greater than regulatory requirements of 15% as per BNR instruction.

## Asset Structure

**Table 4.7: Asset Composition**

	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>
Cash & banks	5,655,983	5,436,484	7,255,115	5,165,710	3,144,450
Loans	2,501,488	3,343,728	4,802,404	5,995,922	7,085,566
Debtors	645,591	671,720	794,043	1,904,349	1,037,199
House for sale	2,433,650	3,106,649	3,540,838	1,450,265	2,130,699
Fixed Asset	359,146	431,743	794,127	416,961	563,971
<b>Total</b>	<b>11,595,858</b>	<b>12,990,324</b>	<b>16679495</b>	<b>14,933,207</b>	<b>13,961,885</b>

**Source: Secondary Data**

**Table 4.8: Asset Allocation**

	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>
Cash & Bank	49%	42%	42%	34%	22%
Loans	21.5%	26%	28%	40%	51%
Debtors	5.5%	5%	5%	13%	7%
House for Sale	21%	24%	20%	10%	15.0%
Fixed Assets	3%	3%	5%	3%	5%
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

**Source: Secondary Data**

The table shows shrinkage in the liquid assets (cash and bank) from 49% of the total assets in 2005 to 22% in the year 2009 while the loans representing the core businesses of the bank soared from 21.5% (2005) of total assets to 51% (2009). However, making virtually 100% of loans in one sub sector, residential mortgage lending makes BHR highly undiversified, thus increasing its risk.

## Trend in Mortgage Loans

Loans granted by BHR continued to rise over the last five (5) years at higher rate, 34% in 2006, 44% in 2007, 25% in 2008 and 18.5% in 2009. However, growth was slowed in the last two years (2008, 2009) in reference to

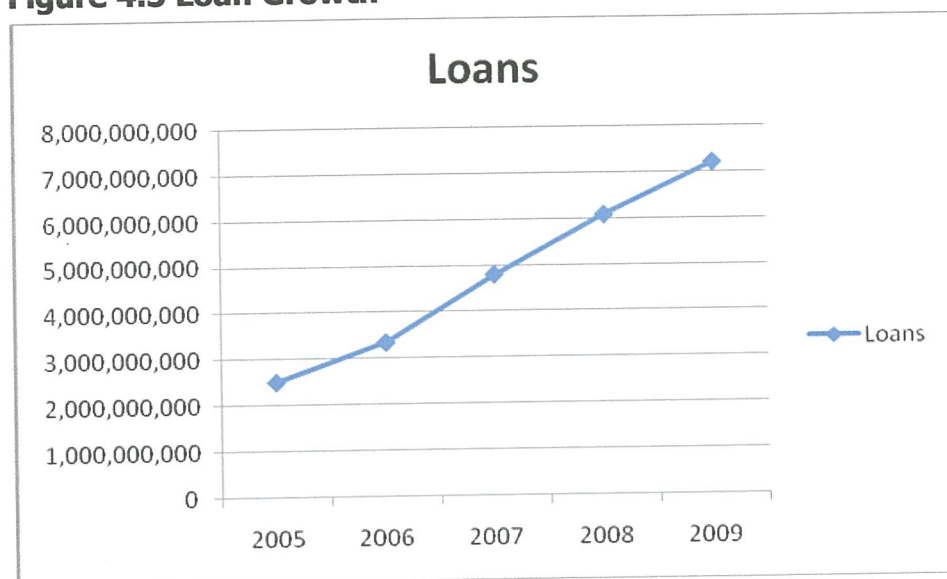
previous years due to global recession. The global recession caused downturn in deposits proceeds collected by the bank hence slowed down growth in loans.

**Table 4.9: Growth in Loans**

Item	2005	2006	2007	2008	2009
Loans (000 Rwf)	2,501,488	3,343,728	4,802,404	5,995,922	7,085,566
Growth Rate	-	34%	44%	25%	18.5%

**Source: Secondary Data**

**Figure 4.5 Loan Growth**



**Source: secondary Data**

### **Trends in Both Loan and Deposits**

Deposits are viewed as crucial sources of loanable funds in most banks. To understand its effects on mortgage loans, the researcher tracked trends in these two variables over the last five years. The following table shows the tendency in both variables.

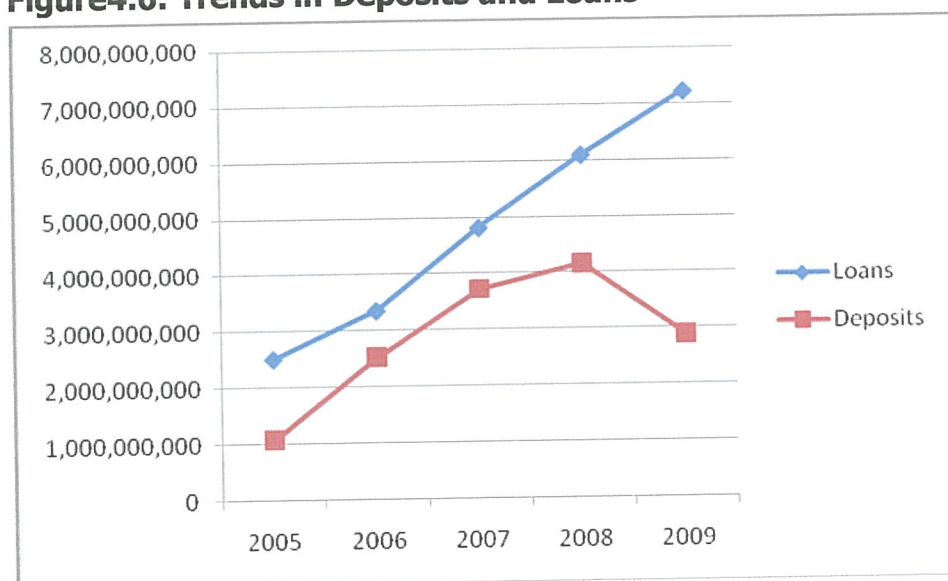
**Table 4.10: Comparison of Growth in Loans and Deposits**

Item	2005	2006	2007	2008	2009
Loans (000Rwf)	2,501,488	3,343,728	4,802,404	6,087,327	7,213,593
<b>Growth Rate</b>	-	<b>34%</b>	<b>44%</b>	<b>24%</b>	<b>18.5%</b>
Deposits (Rwf )	1,071,916	2,520,282	3,715,493	4,154,221	2,882,404
<b>Growth Rate</b>	-	<b>135%</b>	<b>47%</b>	<b>11%</b>	<b>-31%</b>

**Source: Secondary Data**

The above tables shows a steady growth in both deposits and amounts of loans granted by BHR over the last five years except in the year 2009 where deposits plunged by 30.6%. This was attributed to the global financial crisis of 2007-2010.

**Figure4.6: Trends in Deposits and Loans**



**Source: Secondary Data**

### Trends in CAMELS Ratios

CAMELS stand for Capital adequacy, Asset quality, Management quality, Earning, Liquidity and Sensitivity to market risk. It an international benchmark used to gauge bank's soundness by regulatory bodies. To gauge BHR's portfolio and lending trends it was very important to watch closely evolution in key CAMELS ratio. BHR's key ratios show appreciation in core business, liquidity, capital adequacy and assets quality.

**Table4.11: Bank's CAMELS**

Key Ratios	2005	2006	2007	2008	2009
<b>CAPITAL ADEQUACY %</b>					
Capital Adequacy Ratio	25	20.3	17.9	73	74
Loan/Equity	167.8	217.5	269.9	85	93
Equity/Gross Loan	12.8	11.8	11	50	54.8
<b>ASSET QUALITY %</b>					
NPLs/Gross Loan	2.4	12.8	5.18	5.13	3.9
Current Loan/Total Loans	50.3	36.4	39.3	47.6	51.9
Loans/Total Assets	21.5	25.7	28	40	51.1
<b>EARNINGS %</b>					
ROE	10.7	3	12.5	6.5	6.3
Interest Expense/Interest income	19.6	17.8	16.9	5.24	3.7
<b>LIQUIDITY %</b>					
Cash & Bank/Deposit	527.6	215.7	195.2	124	109
Deposits/Gross Loan	42.8	75	77	68	40.6
Liquidity Ratio	696.2	240.7	216	131	118.4
<b>MARKET RISK %</b>					
Forex Loss/Equity	-	-	3.9	0.5	0.37

**Source: Secondary Data**

The above table shows appreciation in the bank's core activities. Loans/assets shows up with a continued growth over the last five years (21.5% to 51.1%), Deposits/loan also improved from 42.8% (2005) to 70% (2008) except 2009 where deposits proceeds collected by the bank dropped by 30%

due to the effects of the global recession. Deposit/equity and equity ratios have also steadily improved due to further capitalization by stockholders of the bank.

The liquidity ratio reduced from 696% (2005) to 118% (2009) as a result of widening loan portfolio of the bank. The bank preferred to maintain a minimum liquidity to the benefits of its core business of mortgage lending hence it shrunk its cash and investments in inter-bank market. Nevertheless, the bank is still in compliance with BNR's liquidity ratio of 100%.

### **Quality of Mortgage Assets**

Loans quality was also critical to study when studying the problems of loans portfolio funding. This is because when loans originated default, bank loses interest and principals issued hence would not originate further loans. Furthermore loans that fall non-performing are expensive in that they must be provisioned as per BNR instructions. Provisions range from 20% of the total loan outstanding on doubtful loans, 50% on litigations loans up to 100% on contentious loans.

Loans are generally categorized into two categories: Performing loans also called current loans and non- performing loan. A loan is placed in non-performing category when a scheduled loan repayment is past due for more than 90 days. Loans are grouped in 5 categories of performing and non-performing as stipulated by BNR instruction.

This instruction stipulates further that loans be classified as follows: Current loans which have had no delay in any scheduled repayments, under supervision loans which have a past due repayment of less than 90 days, doubtful loans with a retard in repay between 90-180 days, in litigation loans with a retard in repay



between 180-360 days and contentious loans with retard in repay above 360 days.

The following table depicts each loan category and amount outstanding on balance sheet of the bank since 2005 till 2009.

**Table4.12: Loan Categories**

<b>Loan Category</b>	<b>Amount Per Loan Categories (Rwf 000)</b>				
	2005	2006	2007	2008	2009
Current Loan	1,259,324	1,219,369	1,885,951	2,902,853	3,745,214
Watch Loans	1,181,562	1,696,234	2,667,272	2,871,647	3,180,388
Doubtful	57,591	352,253	135,075	237,173	166,797
In Litigation	0	70,532	114,104	52,967	69,214
Contentious	3,010	5,338	0	22,685	51,979
Total Loans	2,501,488	3,343,728	4,802,404	6,087,327	7,213,593

**Source: Secondary Data**

BHR's credit policies stipulate that all loans in litigation and contentious categories must be referred to the legal unit for recovery through legal proceeding while the remaining categories are enforced by credits administration.

**Table4.13: Non- Performing Loans**

<b>Item</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>
Watch loan/Total Loans	47%	51%	55.5%	47%	44%
Non Performing	2.4%	13%	5.18%	5.13%	4%

**Source: Secondary Data**

The non-performing loan rate (less than 90 days past due) was kept under one digit except in 2006 where it reached the highest of 13% of the total portfolio but fell considerable in the followed years to 4% in 2009. However, BHR loan portfolio is deteriorated when considered number of watch loan. The number of loans with past due of more than 1month was 44 percent of total loans in 2009 representing more than 3 billion out of 7billion outstanding loans. Yet this seems an improvement given previous years whereby loans under



supervision rose to 47 % (2008 and 2005), 55% (2007) and 51% (2006) of the total loans.

### **Challenges Facing BHR in Mobilization of Capital**

Though the mortgage portfolio of BHR showed greater improvements with expansion in both funding proceeds (deposits and shareholder funds), and loans disbursed to customers, its financing remained a drop in ocean given mortgage loan demand.

To understand major hurdles blocking BHR to mobilize huge financial resources that would allow meeting its demand, the researcher prepared of questionnaires to 38 sampled managers of the bank. The questionnaire was structured in likert format comprised of series of declarations and respondents had to show the scale at which they agree or disagree with each suggested declaration by tick.

### **Lack of Mortgage Refinancing Company in Rwanda**

**Table 4.14: Lack of Mortgage Refinancing Company**

<b>Option</b>	<b>Frequency</b>	<b>Percentage (%)</b>
Strongly Disagree	3	8
Disagree	3	8
Strongly Agree	2	5
Agree	30	79
Total	38	100

**Source: Primary Data**

At this point, the research wanted to know the scale at which the absence of mortgage refinancing window in Rwanda was affecting mortgage lenders in the country. The tallied results showed an overwhelming support going to this statement. Majority of respondents 79% agreed that lack of a refinancing facility

for mortgage assets was a major obstruction to mortgage portfolio funding in banks.

The respondents stated that deposits posed a mismatch in the durations of the assets and liabilities. While deposits tend to be of short-term (less than a year), the mortgage loans were granted for a 15years. To hedge such risk the BHR designed housing accounts and time deposits plan where proceeds flow monthly till a required down payment is reached hence bank is able to predict withdrawals and liquidity levels.

### **Inadequate Capitalization**

**Table 4.15: Inadequate Capitalization**

<b>Option</b>	<b>Frequency</b>	<b>Percentage (%)</b>
Strongly Disagree	3	8
Disagree	8	21
Strongly Agree	2	5
Agree	25	66
Total	38	100

**Source: Primary Data**

This statement was made to test whether managers perceived the share capital of the bank (BHR) as sufficient in relation to mortgage sector financing. This is because loan meant for housing represents generally a sizeable sum hence bank ought to have a large cushion for these loans.

The compiled results showed 66% of agreeing with the declaration. This group argued that mortgage loan represents substantial investments involving larger sums of money hence the bank must possess a large cushion to back up its loan assets.

The current owner's capitalization of the bank is only Rwf 6,431,866,976 millions. This is slightly higher than the minimum share capital required by the

BNR set at Rwf5 billion. However, it is not surprising to see commercial banks setting the minimum share capital equal or slightly higher to the legal capital requirements. This is because, equity capital are the most expensive sources of funding in comparison with debts and deposits sources of funding.

This offers leveraging gains when the bank is able to use deposits and debts in combination with less equity and achieve higher return to pay off debts interest and leave a surplus return to owners. Thus, its return on equity would be higher. But, it has a downside when bank's assets are pegged to owners' capital as it may not be allowed to originate large loans.

### **Low Income of Customers**

**Table 4.16: Low Income of Customers**

<b>Option</b>	<b>Frequency</b>	<b>Percentage (%)</b>
Strongly Disagree	5	13
Disagree	1	3
Strongly Agree	1	3
Agree	31	81
Total	38	100

**Source: Primary Data**

A down payment is the sum paid by the mortgagor as his/her contribution to the property to develop in addition to loan secured from the bank. This is construed as the borrower's participation in the house to be built. All mortgage lending banks in Rwanda require borrower to make a down payment of 30% in order to qualify for mortgage. Large number of respondents (81%) agreed that majority borrower's income is too low to build up down payment.

This finding seems to agree with study carried out by Oyier, Ketley & Davis (2008) which shows that of the 270 000 formally employed, only around 50 000 people earn above RWF1.2 million (US\$2000) per month. This means

that the income of the bulk of the population in Rwanda falls below the level where they can secure mortgage financing in the formal market.

### **Lack of Efficient Capital Market**

**Table 4.17: Lack of Efficient Capital Market**

<b>Option</b>	<b>Frequency</b>	<b>Percentage (%)</b>
Strongly Disagree	4	10
Disagree	3	8
Strongly Agree	1	3
Agree	30	79
Total	38	100

**Source: Primary Data**

The results shows that 79% of the respondents agreed that lack of a functioning capital markets in Rwanda hampered funds raising efforts of banks. 3% strongly agreed while 8% disagreed and 10 strong rejected the statement.

This holds true because only a total of Rwf 17.75 billion has been raised through bonds on the Rwanda stock market (ROTC), as of March 2010. According to statistics from the Capital Markets Advisory Council (CMAC) that show the performance of the market since its inception, three government bonds worth Rwf 16.75-billion each have been issued and one corporate bond from BCR bank worth Rwf 1 billion was issued and they were listed on the OTC market.

However, since the launch (January, 2008) of the capital markets in Rwanda the secondary markets has recorded a turnover of 607.3Rwf million (December 2009). This is broken down into 457.3 Rwf million of T-Bills against 150 Rwf million for one corporate bond (BNR, 2009). This shows low liquidity in the secondary markets.

Nevertheless, a couple of promising achievements have been registered over a period of 2 years of existence of capital markets. Governing legal framework have been approved together with both tax and non-tax incentives to pull in companies. The equity market was activated by the KCB's equity cross-listing worthy 2.2 Rwf billion.

As regard to regional integration, the Capital Market Advisory Council (CMAC) has signed a Memorandum of Understanding with the East African Securities Regulatory Authorities (EASRA), the regional body of capital market regulators. CMAC has also joined East Africa Stock Exchange Association (BNR, 2009). This gives companies in Rwanda the chance to cross-list in regional securities exchange such as Nairobi and Uganda and raise long funding.

### **Absence of Secondary Market for Loan**

**Table 4.18: Absence of Loan Sale Market**

<b>Option</b>	<b>Frequency</b>	<b>Percentage (%)</b>
Strongly Disagree	5	13
Disagree	9	24
Strongly Agree	4	10
Agree	20	53
Total	38	100

**Source: Primary Data**

Loans may be pledged as collateral to sell bonds in the primary markets as they may be sold themselves in case a need of liquidity arises or to replace them with highly yielding ones. Secondary markets for loan encourage banks to originate more loan as liquidity is guaranteed in the secondary markets and offers option to adjust quickly when bank undershoots capital adequacy. However, loan sale market is of non existence in Rwanda. 63% of respondents agreed while 37% state that this is not a problem.

## Lack of Credit Rating Agencies

**Table4.19: Credit Rating Agencies**

Option	Frequency	Percentage (%)
Strongly Disagree	2	6
Disagree	13	34
Strongly Agree	5	13
Agree	18	47
Total	38	100

**Source: Primary Data**

Over the last five years, there was no single credit rating bureau in Rwanda. More than half of respondents (60%) agreed that absence of such agencies constituted a challenge especially when dealing with institution clients. 40% of respondents believed that this was not a major problem since majority of clients are individual borrowers who are required to channel their salaries in the bank till the loan is fully repaid and in this case credit risk appraisal is straightforward.

However, it remains harder to compute cost of debt capital and risk weighted assets when non credit rate available. For example when computing capital adequacy ratio, all unrated mortgage debtors were 100% risk rated due to lack of credit grades which may not be correct. Credit rating is also a pre-requisite in the developments of mortgage securitization and housing markets.

## Mortgage Laws

**Table4.20: Mortgage Law**

Option	Frequency	Percentage
Strongly Disagree	3	8
Disagree	10	26
Strongly Agree	5	13
Agree	20	53
Total	38	100

**Source: Primary Data**

The mortgage law was passed on May 2009 in a bid to regulate mortgage lending in the country. The law sets out the rights and obligations of both mortgagor and mortgagee, regulation of registration, transfers, foreclosure and the use of proceeds recouped from the sale of mortgaged property and issues of referral to courts. More than half of managers (63%) agree that mortgage law is still hindrance.

The new law contains favoring provisions for banks. For example foreclosure is speedy as registrar general is vested with power to appoint a receiver who sells the mortgaged property and pay the mortgagee. However, the mortgagor has the right to seize the court to halt sale of the property or re-price the property. The court may cancel, vary, or suspend or postpone the remedy sought by the mortgagee for a period it consider reasonable.

Respondents stated that there was also improvement in titling processes since this function was placed at the district level under land bureau departments. Respondents revealed that securing title takes roughly 3weeks while it would take more than a year in the past. However, respondents revealed that there was also backlog of applications dating back in 2004 whose titles are still pending.

### Managers' Position toward Solutions

In light to challenges, the researcher had proposed a series of solutions to the aforementioned challenges where respondents had to mark off to show whether they agree or disagree. Tallied results are shown here below:

### Recapitalization of the BHR

**Table4.20: Recapitalization of BHR**

Option	Frequency	Percentage (%)
Strongly Disagree	7	18
Disagree	1	3
Strongly Agree	3	8
Agree	27	71
<b>Total</b>	<b>38</b>	<b>100</b>

**Source: Primary Data**

The big number of managers who filled this question (79%) believed recapitalization is urgent and stated that this proposal has been submitted to current stockholders of the bank. Managers also stated that International Finance Corporation (IFC) was to invest in equity share of bank US \$1million (572 Rwf million) giving the IFC 20% share holding in the bank.

### Restructuring BHR into Mortgage Liquidity Company

**Table 4.21: Restructuring BHR into Mortgage Liquidity Company**

	Frequency	Percentage (%)
Strongly Disagree	4	10
Disagree	4	10
Strongly Agree	7	19
Agree	23	61
<b>Total</b>	<b>38</b>	<b>100</b>

**Source: Primary Data**



In a bid to solve housing crisis in Rwanda, the government is in the process of restructuring BHR into a mortgage liquidity facility that will support long-term lending activities by Primary Mortgage Lenders (PML) in the country.

### **Sale of Assets Backed Bond**

**Table 4.21: Sale of Asset Backed Bond**

<b>Option</b>	<b>Frequency</b>	<b>Percentage (%)</b>
Strongly Disagree	5	13
Disagree	10	26
Strongly Agree	20	53
Agree	3	8
<b>Total</b>	<b>38</b>	<b>100</b>

**Source: Primary Data**

Managers agreed that sale of assets-backed securities is suited mortgage funding instruments given that it reduce the cost of funding, credit risk and enhances liquidity. However given the current stock market that is fledgling, sale of bonds was not used by banks. For BHR to issued assets backed bonds, it needs to improve overall quality of loans assets. These bonds would attract lower interest rate due to low risk.

### **Long term Debt**

**Table4.23: Long term Debt**

<b>Option</b>	<b>Frequency</b>	<b>Percentage (%)</b>
Strongly Disagree	12	31
Disagree	1	3
Strongly Agree	3	8
Agree	22	58
<b>Total</b>	<b>38</b>	<b>100</b>

**Source: Primary Data**

Managers revealed that discussions between the bank and International Finance Corporation (IFC) and shelter Africa are underway to obtain a billion francs debt from the two institutions. Hence long term debt as fund mobilization alternative scored a support from managers.

### **Syndication with Other Banks**

**Table 4.24: Syndication with Other banks**

<b>Option</b>	<b>Frequency</b>	<b>Percentage (%)</b>
Strongly Disagree	3	8
Disagree	9	24
Strongly Agree	2	5
Agree	24	63
Total	38	100

**Source: Primary Data**

Due to shortage of funds, BHR sets its financing ceiling to 30millions Rwf. This means that commercial properties are not eligible to bHR loans since surely their value is above the loan cap. Loans syndication provides bank chance to originate loans and sell participations to other banks or arrange syndicate prior to origination and avoid undershooting capital ratio or concentration of assets.

## **CHAPTER FIVE**

### **FINDINGS, CONCLUSION AND RECOMMENDATIONS**

#### **Findings**

Housing stock represents large investments any economy can boast. Housing projects require huge capital investment for both corporate and households and generally require borrowings to top upon developer's capital and finish the property. Hence, every developer is expected to borrow in order to acquire a house.

Banque de l'Habitat du Rwanda (BHR) is commercial bank 86% owned by the government and Caisse Social du Rwanda (CSR) and was capitalized for the purpose of providing long term mortgage loans in Rwanda. It is presently well capitalized with about 7billion in net worth constituting almost 74% of risk-weighted assets as of December 2009.

The study shows that the balance sheet of the BHR is very tiny in relation to highly priced assets (house) it is ought to finance with only 13 billions (US \$ 22 millions) in total funding as per 2009. Deposits funding have been increasing since 2005 till 2008 from 1billion (2005) to 4 billion Rwf (2008) while they dropped by 30% in 2009 as a result of the global recession.

Deposits represented very small share of total loanable funds 9 % (2005) though gradually augmented to 28% in 2008 of total funding of BHR before plunging to 21% in succeeding year 2009. Since the year 2005 till 2009 BHR only collected a total of 14 billion Rwf. Deposits attracted were in both demand and core deposits. What is worrisome is that demand deposits viewed as risky and unsuited for lending exceeded core deposits. While demand deposits represented 52 % of total deposits core deposits represented 48 % as per 2009. Demand

deposits are unsuited for mortgage funding and are rarely used by prudent banks even in funding other short term assets.

Deposits to gross loans ratio had also fallen down from 77% in the year 2007 to 40% in the year 2009. Loans to total assets of the bank had also sharply increased from 21% in 2005 to 51% in 2009. Amount of Mortgage loans have also increased annually, from 2 billion Rwf in 2005 to 7 billion in 2009. BHR was able to give out a totaling 23 billion Rwf over the past five years. The loan ceiling was set at 30 Rwf million excluding commercial property. BHR holds a very tiny market share of 6% of the total mortgage markets in Rwanda though it specializes in mortgage as per 2009. BHR makes virtually 100% of all loans in one sector residential mortgage lending making the bank's assets highly concentrated, undiversified and highly risky.

Mortgage assets portfolio displayed deterioration with the number of watch loans rising up to 55% (2007), 52 (2008) before falling to 47% in 2009. However non-performing loans rate (with less than 90 days past due in scheduled repayment) was kept one digit except in 2006 where it rose higher to 13% and fell to 4% in 2009.

Majority of respondents agreed that capital market was not allowing banks to effectively funding their portfolio of assets. This holds true because since capital markets was set up in Rwanda in January 2008, only 17 billion Rwf were raised in its bond primary market. However, only one corporate bond worth 1 billion was issued. Secondary market recorded also a very low volume of 607 millions Rwf. This shows a very low liquidity in the secondary market.

However, promising achievements have been registered including integration in other Eastern Africa exchange securities. Equity market was ignited

by the cross-listing of KCB worth 2.2 Rwf billion. This gives chance to companies in Rwanda to cross-list in regional exchange and tap long term funding.

Other challenges cited included low income by large number of mortgage debtors, lack of a mortgage liquidity facility in the country and non existence of secondary mortgage operations. Secondary market for mortgage in Rwanda remains untapped. The mortgage assets remain illiquid and mortgage originators are compelled to hold their assets till maturity or pay-off. This obstructs bank to potential for earning servicing fee and originate further loans.

Managers agree that the bank needs to embrace long run suited assets funding securities such as assets backed-bonds, long term debts and recapitalization in the equity to cushion against on and off-balance risk exposure of the bank. They also confirmed that discussions are underway between the bank and IFC to obtain a billion dollar funding in both equity (20%) and debt worth (572 Millions Rwf) to adequately capitalize the bank.

## **Conclusion**

This study was performed in order to uncover mortgage portfolio funding tools that would be used by banks in Rwanda to raise sufficient loanable funds for mortgage sector financing. Banque de l'Habitat du Rwanda (BHR) which is a government vehicle was expected to take the lead in mortgage market.

However as the study results showed BHR capital base is too narrow to allow the bank to act as specialized mortgage lenders. Narrow capital base is attributable to under developed capital market and banking system in Rwanda but also to low income of bulk of population.

BHR fund raising policy seems to be risk-averse. Over the past five years its sources of funds have been only deposits and grants secured from the government. The risk-aversion is evidenced by shying away from financial leveraging. Since 2005 to 2009, BHR liabilities were owed to the governments. Shareholders capital base was kept also tiny and slighter above legally required amount.

The status of being a government sponsored gives BHR a good credit rating and could take advantage this status to secure long-maturity debt. This status makes the bank default remote and could borrow at risk-free rate or with a slighter premium to riskless securities either on the local market or from financial institutions.

Furthermore, using debts financing would have allowed the bank to diversify away its sources of funds from a sole source (deposits), access long term fund which eventually enable the bank to hedge both interest and maturity risk exposure in its portfolio.

It is worth to note that bulk of bank's clients have low income that shut them out of formal markets where they may obtain mortgage. Required down payment (30% of market value of the property) excludes majority of people to qualify for BHR loans. Thus, government needs to offer credit guarantees to this category so that they may be extended long maturity or reduced down payment required.

In a nutshell, the BHR needs to take a bold step in mobilizing savings for its mortgage portfolio. This will involve diversifying sources of funding away from deposits to issuing bonds in the stock markets, and taking term loans from other institutions such as World Bank group. In addition BHR needs to start nurturing

secondary markets transactions to sale loans in money and inter-bank markets to be able to originate more loans in year.

This would be possible given its credit status and when loans are placed with recourse. BHR also needs to take a lead in arranging syndicates of banks when mortgage loan request exceed the balance sheet capacity of a single entity. This permits commercial properties development that current failed to obtain financing.

## **Recommendations**

The key findings of the study indicate that currently BHR is unable to honor its mortgage loans requests due to its narrow capital base. Hence there is a need to expand its balance sheet and diversify its funding sources away of deposits.

1. BHR can in the future tap long term fund by selling assets-backed bonds. This will require the bank to improve overall quality of loans or secure credit guarantee from the government. Investors for these securities include insurance companies, commercial banks, social security fund. Moreover, these securities would attach a low coupon rate of interest given the credit status of the BHR and backing of loans pledged on these securities.
2. BHR can also tap long term funding by borrowing from other international institutions using its creditworthiness or solicit government credit guarantee or currency swaps. It is good that managers stated that discussions are underway between BHR and IFC, Shelter Africa to obtain a billion dollar debt.
3. Banque de l'Habitat du Rwanda (BHR) should actively continue to solicit future home-buyer through home ownership long term saving plans. These plans provide a structured approach for future homeowners to accumulate

the 30% down payment currently required by most commercial banks to purchase a home over time.

4. BHR can in the future arrange syndicated mortgage loans for commercial property funding and provide both liquidity and credit enhancements to other mortgage lenders. This will require the bank to invest sizable sums of money in money markets instruments such as treasury bills.
5. BHR will need to be recapitalized to cushion these debts and widening mortgage assets as set out in Basel Accord. Government will need to inject seeds capital or sell equity shares to other institutional investors.

### **Suggested Further Researches**

Future researchers would tackle areas of prudent regulation of new mortgage portfolio funding tools such as loan-backed securities, whole loans sales and syndicated loans.



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## APPENDIXES

### Appendix I: Transmittal Letter



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Website: www.kiu.ac.ug

**OFFICE OF THE DEPUTY VICE CHANCELLOR  
SCHOOL OF POSTGRADUATE STUDIES AND RESEARCH**

THE MANAGEMENT,  
HOUSING BANK OF RWANDA.

20<sup>th</sup> July, 2010

Dear Sir/Madam,

**RE: UWAYEZU KELVIN REG. NO. MBA/20020/82/DF**

The above mentioned is a bonafide student of Kampala International University pursuing a Masters of Business Administration.

He is currently conducting a field research the title of which is **"Addressing the Challenge of Mortgage Portfolio Finance by Banks in Rwanda: Case Study of Banque de L'Habitat Du Rwanda. Effectiveness** As part of his research work he has to collect relevant information through questionnaires, interviews and other relevant reading materials.

Your institution has been identified as a valuable source of information pertaining to his research project. The purpose of this letter is to request you to avail him with the pertinent information he may need.

All and any information shared with him will be used for academic purposes only and we promise to share our findings with your institution. Rest assured the data you provide shall be kept with utmost confidentiality.

Any assistance rendered to him will be highly appreciated.

Yours truly,

  
**Novembrieta R. Sumil, Ph.D.**  
**DVC, SPGSR**



*"Exploring the Heights"*

## Appendix ii: Informed Consent



**Banque de l'Habitat du Rwanda s.a**

**Rwanda Housing Bank**

**Banki y'Imiturire mu Rwanda**

R.C. / T.R. : A.061/Kig TIN: 100292634

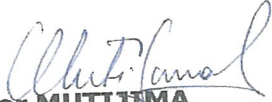
Capital social / Share Capital : 6.431.866.976 Frw

### To whom it may concern

We wish to attest that **Mr Kelvin UWAYEZU** carried out his research at **Banque de l'Habitat du Rwanda** in relation to his academic work with title "Addressing the Challenge of Mortgage Portfolio Finance by Banks in Rwanda : Case Study of Banque de l'Habitat du Rwanda."

**Mr UWAYEZU**, who is pursuing his Masters of Business Administration at Kampala International University, was recommended by the Deputy Vice Chancellor, School of Postgraduate Studies and Research.

Done in Kigali, the 16<sup>th</sup> August 2010

  
**Hector MUTIJIMA**  
Director of Human  
Resources and Logistics



  
**Gervais NTAGANDA**  
Director General

Avenue de la justice; B.P. / P.O.Box : 1034 Kigali-Rwanda; Téléphone / Phone : (+250) 252 576382 / 252 571447 / 252 573843  
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### Appendix iii: Instruments

#### Questionnaire for BHR Staff

The researcher is a graduate student of Kampala International University (KIU). He is investigating issues of Mortgage Portfolio Financing in Banks. He is conducting this study in fulfillment of the requirements for the Award of Master of Business Administration (MBA).

Answering this questionnaire is a valuable support accorded to the student. The information is solely sought for academic purpose and its confidentiality is highly guaranteed. Please answer each question honestly.

#### Section One. Respondent's Profile

1.1 Name.....(optional)

1.2 Department .....

1.3 Post .....

Gender .....

#### Section Two: Challenges Facing Mortgage Lenders

BNR estimates (2009) show annual mortgage demand of Rwf 500 billion while the total assets of all commercial banks were precisely Rwf 76 billion. Thus, we wish to know challenges your bank encounters in financing its Mortgage Portfolio (Please tick to show the extent to which you agree/disagree with each suggested challenge

	Strong disagree	Disagree	Agree	Strongly Agree
Lack of functioning capital market to sell securities				
Excessive legal reserve by BNR				
Lack of adequate security by borrower				
Lack of mortgage refinancing window				
Credit control of National Bank				

Inadequate capitalization of BHR				
Stifling mortgage law				
Lack of secondary market for loan				
Lack of credit rating bureaus				

### **Section Three: Solutions to Address Challenges**

The following are solution we think would effectively enable banks to raise more funds hence alleviate shortage of housing units in the country. Please tick to show to what extent you agree or disagree with each declaration

	Strongly disagree	Disagree	Agree	Strongly agree
Mortgage loan securitization				
Sale of mortgage bonds in stock markets				
Recapitalization of BHR by its owners				
Syndication of banks for larger loan				
Government subsidizes				
Reduction of legal reserve by BNR				
Credit Rating agencies				
BHR should borrow more long-run debt				
Restructuring BHR into liquidity facility				
Loan resale market for enhanced liquidity				
Functioning capital markets by government				

***Thanks for your co-operation***

*Any queries, further information, please don't hesitate to contact me.*  
Kelvin Uwayezu (MBA, Bachelor's Degree in Business Management)  
Email: [uwakelvino@yahoo.fr](mailto:uwakelvino@yahoo.fr)  
Phone: +250-7850 7825/ +256-7836 86249

## Appendix IV: Researcher's Curriculum Vitae

<b>PERSONAL DETAILS</b>	
Family Name: Uwayezu	Nationality :Rwanda
First Name: Kelvin	District of Residence: Nyarugenge
Date of birth:1984	Province: Kigali
Phone:+250785078251	E-mail address: uwakelvino@yahoo.fr

HIGHER EDUCATION			
NAME & ADDRESS OF UNIVERSITY: <i>Université Libre de Kigali (ULK), Kigali, Rwanda</i>	Attended From	Attended To	MAIN COURSE OF STUDY: <i>Business Management</i>
	2005	2008	
	DEGREE OBTAINED: <i>Bachelor's Degree</i>		
NAME & ADDRESS OF UNIVERSITY: <i>Kampala International University (KIU), Kampala, Uganda</i>	Attended From	Attended To	MAIN COURSE OF STUDY: <i>MBA Finance &amp; Banking</i>
	2009	2010	
	DEGREE PURSUED <i>Master Degree</i>		

<b>SHORT COURSE/PROFESSIONAL COURSE</b>		
Name course/Program	Attended	Area of Learning
Academy for Leadership in Competitiveness and Prosperity (ALCP) (Rwanda)	2008	<ul style="list-style-type: none"> <li>• Strategy setting &amp; execution</li> <li>• Cluster/Industrial Policies</li> <li>• Leadership</li> </ul>
Internship BNR (Rwanda)	2008	<ul style="list-style-type: none"> <li>• Money Market</li> <li>• Interbank Markets</li> <li>• BNR Open Market Operations</li> </ul>

<b>BUSINESS CONTESTS</b>		
Name course/Program	Attended	Area of Learning
Global Enterprise Experience, Willington , New Zealand	2008-2010	<ul style="list-style-type: none"> <li>• Writing/Presenting Standard Business Plan</li> <li>• Work/Communicate via Cyberspace</li> <li>• Working in Diverse Teams</li> </ul>

<b><u>PRIZES/AWARDS</u></b>		
Name of Award/Prize	Awarded	Awarding Organization/Address
Commitment Award	2010	Global Enterprise Experience /wellington University , New Zealand
Highly Commended Journal Award	2010	Idem

### **Languages**

1. Kinyarwanda (Mother Tongue)
2. French (Good)
3. English (Good)

### **Declaration**

I hereby certify that the information given in this CV is correct and complete to the best of my knowledge and beliefs.

