Mobilization of Capital for Mortgage Loans Portfolio Funding at Banque De L'habitat Du Rwanda

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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.
Keywords: Mobilization of Capital, Mortgage Loans, Portfolio, Financing, Banque de l'Habitat du Rwanda (BHR).

1. Introduction

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).

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.

2. 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.

3. Methodology

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:

$n= N/1+N (e)^2$

Where n= Sample Size

N= Population

e= Error Margin of 5%

Hence, Sample Size $n= 42/1+42 (0.05)^2=38$

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.

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.

4. Result and Discussion

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 1: Funding Structure

Sources of Funds (000 Rwf)					
	2005	2006	2007	2008	2009
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 2: Capital Structure

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

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).

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 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: 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.

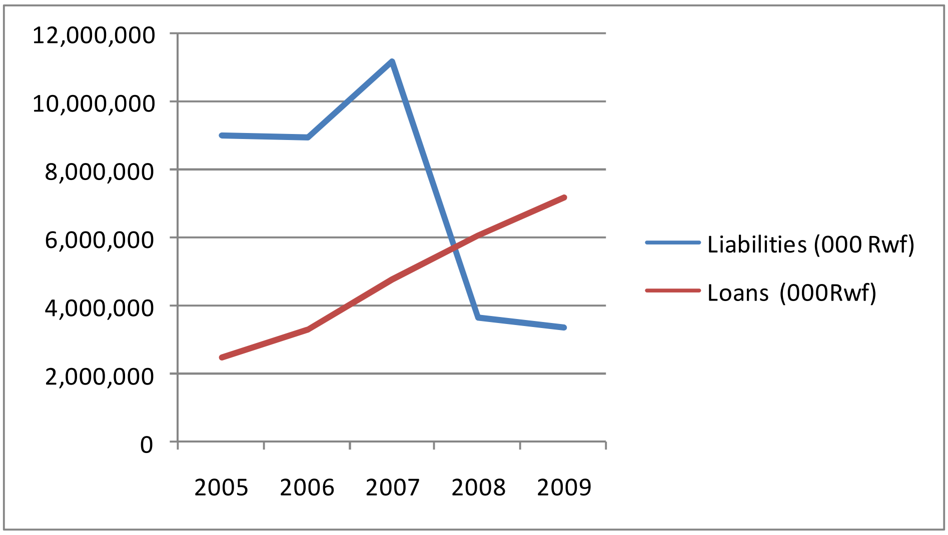
Table 5: Decline in Debts

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 1 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. Howevever, 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.

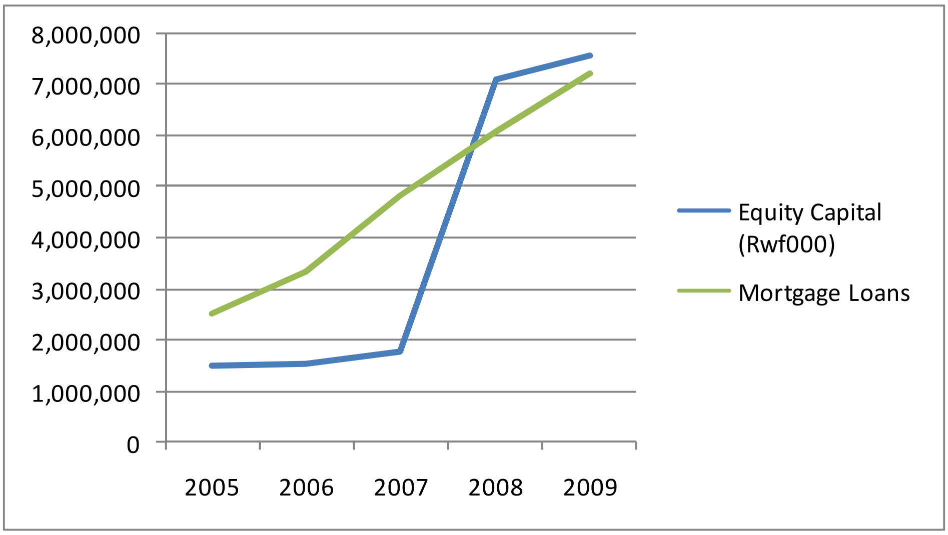
Table 6: Growth in Equity Capital

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 2 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 7: Asset Composition

	2005	2006	2007	2008	2009
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
Total	11,595,858	12,990,324	16679495	14,933,207	13,961,885

Source: Secondary Data

Table 8: Asset Allocation

	2005	2006	2007	2008	2009
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.%
Fixed Assets	3%	3%	5%	3%	5%
Total	100	100	100	100	100

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 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

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.

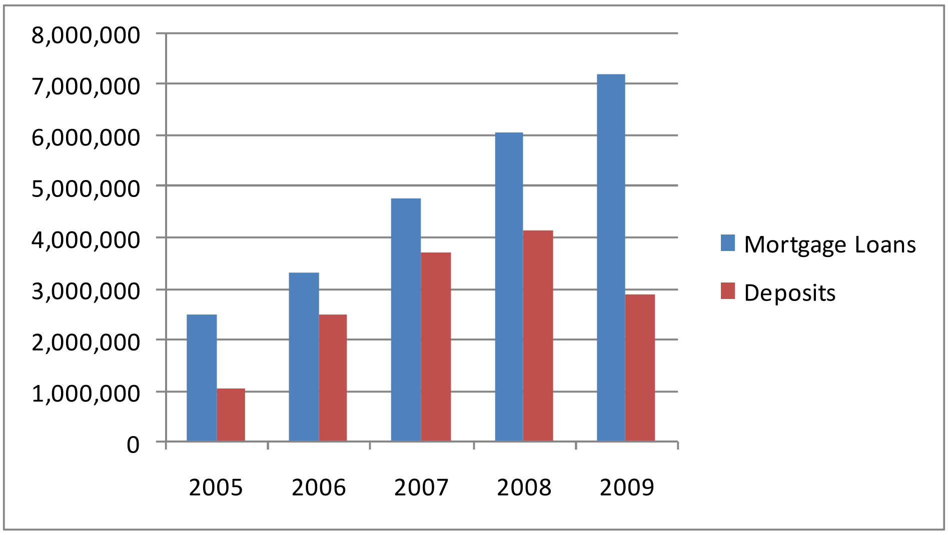
Table 10: Comparison of Growth in Loans and Deposits

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

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.

Figure 3: Mortgage Loans and Deposits



Source: Secondary Data

Loans are generally financed by deposits proceeds, hence the increase in deposits led in turn to upturn in the amounts of loans granted by the bank. The exception was in 2008 and 2009 where banks in Rwanda suffered a liquidity crunch. However, loan size of BHR increased thanks to measures taken by (BNR) to prevent severe contraction in credit ,including reduced reserve ratio (from 8% to 5%), suspended rollover of T-bills that matured during 2009 and liquidity facility (27.3 Rwf billion) put up for commercial banks refinancing in the same year (BNR, 2009).

Hence, there was a positive correlation between deposits and loans (0.686 Pearson) over the past five years. When excluded the year 2009 where the bank suffered credit crunch, the correlation soared stronger to 0.95. Moreover, the deposits to loans ratio soared from 42% (2005), 75% (2006), 78% (2007) before plunging to 68% (2008) and 40 % (2009) as result of global credit crunch.

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.

Table 11: Bank's CAMELS

Key Ratios	2005	2006	2007	2008	2009
CAPITAL ADEQUACY %					
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
ASSET QUALITY %					
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
EARNINGS %					
ROE	10.7	3	12.5	6.5	6.3
Interest Expense/Interest income	19.6	17.8	16.9	5.24	3.7
LIQUIDITY %					
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
MARKET RISK %					
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.

Table 12: Loan Categories

Loan Category	Amount Per Loan Categories (Rwf 000)				
	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.

Table 13: Non- Performing Loans

Item	2005	2006	2007	2008	2009
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 14: Lack of Mortgage Refinancing Company

Option	Frequency	Percentage (%)
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 15: Inadequate Capitalization

Option	Frequency	Percentage (%)
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 16: Low Income of Customers

Option	Frequency	Percentage (%)
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 17: Lack of Efficient Capital Market

Option	Frequency	Percentage (%)
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 Rwfmillionof 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 frame work 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 18: Absence of Loan Sale Market

Option	Frequency	Percentage (%)
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 nonexistence in Rwanda. 63% of respondents agreed while 37% state that this is not a problem.

Lack of Credit Rating Agencies

Table 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 noncredit 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

Table 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 mortgage. 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

Table 21: Recapitalization of BHR

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

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 LiquidityCompany

Table 22: Restructuring BHR into Mortgage Liquidity Company

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

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 23: Sale of Asset Backed Bond

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

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

Table 24: Long term Debt

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

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 25: Syndication with Other banks

Option	Frequency	Percentage (%)
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.

5. Conclusion and Recommendations

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.

- 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.
- 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.
- 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.
- 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.
- 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.

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