DETERMINATION OF OPTIMAL BANK LENDING RATES UNDER THE MULTI-CURRENCY REGIME IN ZIMBABWE.

BY

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R107671Q

DISSERTATION SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF BUSINESS ADMINISTRATION, GRADUATE SCHOOL OF MANAGEMENT, UNIVERSITY OF ZIMBABWE

SUPERVISOR: MR A. M. CHIDAKWA

FEBRUARY 2013
DECLARATION

I, Lincoln Chowa, do hereby declare that this dissertation is the result of my own investigation and research, except to the extent indicated in the Acknowledgements, References and by comments included in the body of the report, that it has not been submitted in part or in full for any other degree to any other university.

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Student signature       Date

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Supervisor’s Signature Supervisor’s Name             Date
DEDICATION

This dissertation is dedicated to my dear wife and two sons who occupy an integral part of my life. During the research study period, my wife and two sons endured different levels of inconveniences which included chief amongst others having to live with reduced budget income, increased physical absence from home and reduced family time. My prayer is God richly bless them for standing with me.
ACKNOWLEDGEMENTS

This research is the product of physical and spiritual contributions by a number of entities both at individual and corporate levels. It is imperative for the researcher to acknowledge the entities who acted distinctively by specifically identifying them. My first profound appreciation goes to the Almighty God for the grace that allowed me to start, work and complete this dissertation.

Special thanks are given to my supervisor Mr A. M. Chidakwa who played a pivotal role of the “sailor” for guidance and support extended to me. Mr Chidakwa’s residential place became a second home to the researcher. I am also appreciative of all the respondents who participated by engaging their precious time to this research study. I am greatly thankful to the University of Zimbabwe Graduate School of Management team led by the late Doctor M. K.Mutowo for their mentorship to the completion of this dissertation. Lastly I wish also to offer my special thanks to a friend Mr Norman Karidza who is also a colleague in the MBA program who encouraged me to maintain focus and drive towards the mark of completion.
ABSTRACT

The beginning of 2009 saw the ushering in of the multi-currency system in Zimbabwe. The banking sector was resultantly affected, mainly in the area of determination of optimal lending rates. The purpose of the research was to investigate the determination of optimal bank lending rates under the multi-currency regime in Zimbabwe. The study investigated the drivers/variables of bank lending rates, perception on average lending rates and the models to be used in the determination of bank lending rates under the multi-currency era. This study used the survey research strategy. Key players involved in lending practice notable the Ministry of Finance, Reserve Bank of Zimbabwe, Borrowers, and Banking Sector institutions were the population of the study. Consideration was given to both empirical and theoretical literature review to identify determinants of bank lending rates. For the purposes of the research, convenience purposive sampling was employed. The Researcher distributed questionnaires to a sample of 80 that comprised of the key players involved in lending activities. Interviews were also used as a research instrument to aid in research data collection. The collected data was analyzed using SPSS version 18 software.

Findings from the research showed that the general perception on nominal bank lending rates in Zimbabwe under the multi-currency is that they are excessive with a weighted average rate of around 17% per annum. Although the bank lending rates are excessive, a number of factors justify this position. The research project main conclusion is that the determination of bank lending rates should be based on the cost of funding plus a margin where administrative costs directly associated with raising of deposits are also factored in. Recommendations were provided based on the key players in the credit market which are Reserve Bank of Zimbabwe, banking institutions, and Ministry of Finance with a view to improve liquidity in the economy through getting international financial support, attracting foreign direct investment and promoting high corporate governance principles.
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<th>Description</th>
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<tr>
<td>RBZ</td>
<td>Reserve Bank of Zimbabwe</td>
</tr>
<tr>
<td>BAZ</td>
<td>Bankers Association of Zimbabwe</td>
</tr>
<tr>
<td>CZI</td>
<td>Confederation of Zimbabwe Industry</td>
</tr>
<tr>
<td>CAPM</td>
<td>Capital Asset Pricing Model</td>
</tr>
<tr>
<td>TB</td>
<td>Treasury Bill</td>
</tr>
<tr>
<td>NSSA</td>
<td>National Social Security Authority</td>
</tr>
<tr>
<td>IMF</td>
<td>International Monetary Fund</td>
</tr>
<tr>
<td>GDP</td>
<td>Gross Domestic Product</td>
</tr>
<tr>
<td>CPI</td>
<td>Consumer Price Index</td>
</tr>
<tr>
<td>BOP</td>
<td>Balance of Payments</td>
</tr>
<tr>
<td>SPSS</td>
<td>Statistical Package for the Social Sciences</td>
</tr>
<tr>
<td>DPB</td>
<td>Deposit Protection Board</td>
</tr>
<tr>
<td>SME</td>
<td>Small to Medium Enterprise</td>
</tr>
<tr>
<td>ICT</td>
<td>Information communication technology</td>
</tr>
<tr>
<td>CBZ</td>
<td>Commercial Bank of Zimbabwe</td>
</tr>
<tr>
<td>US $</td>
<td>United States Dollar</td>
</tr>
<tr>
<td>FDI</td>
<td>Foreign Direct Investment</td>
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</table>
CHAPTER ONE

INTRODUCTION

1.0 INTRODUCTION
Most banking institutions the world over, rely on well-established guiding framework and basis for the determination of optimal nominal bank lending rates. This research study explores the determinants of nominal bank lending rates in Zimbabwe under the multi-currency regime with an underlying goal of achieving optimal rates. The nominal lending rate is a key macroeconomic variable and as a result is instrumental in guiding the direction and level of the economy’s business activity, though the same levels of interest rates do have different impacts on different economies. The advent of the multi-currency system in Zimbabwe has seen the banking institutions facing widespread outcry on the level of bank lending rates. This has given the impetus to the researcher to explore how these lending rates are being determined and how best they should be determined taking into cognisance the impact on profitability. The lending activity is considered by the banking industry as the most important function for the utilisation of funds, largely due to the view that the major portion of gross profit of the industry is earned from loans and resultanty influencing the profitability of banks (Wei-Shong and Kuo-Chung, 2006). This Chapter outlines the introduction to the research study, background to the study, research problem, research objectives, research questions, hypothesis, justification and scope of research, ethical issues and limitations to the study.

1.1 BACKGROUND TO THE STUDY
Zimbabwe officially adopted the multi-currency system at the beginning of 2009, which saw a number of currencies becoming legal tender and bringing a natural death to the Zimbabwe dollar. Zimbabwe’s multi-currency regime has seen the United States Dollar (US $) as the most actively and significantly traded currency accounting for 80% of all transactions, salaries and wages (Hawkins, 2010). The
Zimbabwe dollar was the official currency pre multi-currency period which covered from 1980 to April 2009. Banking institutions play a pivotal function in every economy. These institutions play an intermediation role whereby they collect money from the excess units and lend it to deficit units. In fulfillment of this role, banking institutions will resultantly help grow the economy as money in the economy is channeled to productive uses. Lending acts as the heart of the banking sector and as such represents a core activity. Loans are the dominant asset and represent 50-75 percent of the total amount at most banks, generate the largest share of operating income and represent the banks greater risk exposure (Mac Donald and Koch, 2006). In Zimbabwe under the multi-currency regime, loans and advances are the largest component in the asset mix constituting 53.41% of the total sector’s assets (RBZ, 2012) and 45% of the industry’s total income is contributed by interest income. This situation is considered the ideal in banking set up and may likely remain that way, or even for the proportion of loans and advances to grow as more and more banking institutions become reluctant to engage in lending activities.

Prior to the multi-currency period, determination of bank lending rates was largely guided by the Central Bank’s accommodation rate. Accommodation provided by the central bank was split between secured and unsecured borrowing (RBZ, 2007). Zimbabwe’s Central Bank, the Reserve Bank of Zimbabwe (RBZ), would set the key accommodation rates, which will be used by all banks to determine their minimum lending rates. The banking sector determined bank lending rates as the minimum lending rate plus a margin. Apart from the accommodation rates other determinants used the included bank’s cost of funds, statutory reserve ratios, market liquidity position and individual bank’s liquidity position.

The multi-currency regime in Zimbabwe has brought with it changes in economic fundamentals surrounding the determination of lending rates. Determination of bank lending rates under the multi-currency period has to a large extent remained unjustified according to public and private opinion as shown by the growing perceived public and private perception that bank lending rates are too exorbitant.
This has posed a plethora of challenges to a number of stakeholders. Such stakeholders include among others banks, policy makers and borrowers. Borrowers as the beneficiaries of loans and advances have encountered exorbitant bank lending rates under the multi-currency regime in Zimbabwe, with nominal rates ranging between 6% to 35% (Ministry of Finance, 2012, IMF, 2012 and RBZ, 2012). This view was supported by the article in the Zimbabwe independent newspaper dated August 17 to 23 2012 which stated that “Banks in Zimbabwe are ripping off their depositors by charging inflated interest rates ranging between 15% and 25%, and imposing exorbitant bank charges which have seen them making massive profits in an ailing economy” (p.2).

Zimbabwe’s average bank lending rates depict a mixed composition when compared to selected regional countries in the table below. The comparison is based on the principle of interest rate parity which takes into consideration the costs of currency denominations. The rates indicated from the table show that Zimbabwe is neither the most expensive, nor the least expensive within the region. This supports the need to assess the determination of bank lending rates, as to ascertain the benchmark rates. A number of factors explain why differences in the lending rates exist, with the major causes being, differences in economic fundamentals, differences in national policies, differences in credit risk level, and differences in political risk level among other issues. Banks that believe the credit risk is high will charge high bank lending rates as compared to regional counterparts (Chagwiza, 2012).
Table 1.1: Average bank lending rates for selected countries for the period 2007 to 2011 based on interest rate parity

<table>
<thead>
<tr>
<th>Country</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Angola</td>
<td>81.49</td>
<td>80.54</td>
<td>99.91</td>
<td>109.67</td>
<td>109.17</td>
</tr>
<tr>
<td>Botswana</td>
<td>6.63</td>
<td>8.4</td>
<td>7.36</td>
<td>6.98</td>
<td>8.08</td>
</tr>
<tr>
<td>Kenya</td>
<td>66.81</td>
<td>84.75</td>
<td>84.34</td>
<td>89.36</td>
<td>94.61</td>
</tr>
<tr>
<td>Lesotho</td>
<td>7.19</td>
<td>10.25</td>
<td>8.07</td>
<td>7.14</td>
<td>8.66</td>
</tr>
<tr>
<td>Mozambique</td>
<td>27.08</td>
<td>28.44</td>
<td>34.27</td>
<td>36.43</td>
<td>30.82</td>
</tr>
<tr>
<td>Namibia</td>
<td>7.11</td>
<td>10.09</td>
<td>7.93</td>
<td>7.04</td>
<td>8.53</td>
</tr>
<tr>
<td>Nigeria</td>
<td>127.94</td>
<td>149.33</td>
<td>171.61</td>
<td>173.21</td>
<td>181.98</td>
</tr>
<tr>
<td>South Africa</td>
<td>7.14</td>
<td>10.29</td>
<td>8.01</td>
<td>7.06</td>
<td>8.55</td>
</tr>
<tr>
<td>Swaziland</td>
<td>7.12</td>
<td>10.19</td>
<td>7.95</td>
<td>7.04</td>
<td>8.55</td>
</tr>
<tr>
<td>Tanzania</td>
<td>1,226.77</td>
<td>1,433.39</td>
<td>1,491.21</td>
<td>1,664.33</td>
<td>1,759.23</td>
</tr>
<tr>
<td>Zambia</td>
<td>4,225.22</td>
<td>5,423.35</td>
<td>5,544.54</td>
<td>5,597.68</td>
<td>5,869.00</td>
</tr>
<tr>
<td>United States</td>
<td>8.05</td>
<td>5.09</td>
<td>3.25</td>
<td>3.25</td>
<td>3.25</td>
</tr>
</tbody>
</table>


Tanzania and Zambia have relatively higher exchange rates against the US dollar resulting in higher lending rates on interest rate parity basis. The formula that has been used to convert local lending rates to a USD common base is given below:

\[
banklendingrate = \left[ l_{ex} \times \frac{(1+lendingrate_l)}{(1+lendingrate_{us})} \right]^{-1}
\]

where, \(l_{ex} = \text{localexchangerate}\)

\(l = \text{local, us = unitedstates}\).

CZI Manufacturing Survey Report (2012) outlines that working capital and funding for recapitalization were the major reasons for closure of companies under the multi-currency regime. Under the multi-currency regime, a number of companies have scaled down operations, closed strategic business units/subsidiaries and other companies have wound up operations completely or shut down. The deep rooted central cause is the high lending rates obtaining under the multi-currency systems. This is supported by EMRA a packaging company that closed, before which it had secured a loan from a banking institution at a rate of 23% per annum (CZI, 2012).
1.1.1 BACKGROUND TO THE ZIMBABWE BANKING SECTOR

The core activities of a bank in Zimbabwe as defined by the Banking Act Chapter 24:20 (2004) include, receiving deposits, extending credit, buying and selling instruments, providing money transmission services, buying and selling foreign currencies, issuing and administering means of payment, money broking, the safekeeping and administration of valuables, providing services as a portfolio manager or adviser or as a financial agent or consultant, financial leasing, entering into or taking cession of hire-purchase, buying and selling shares on behalf of customers, providing credit reference services and such other activities as may be prescribed.

The Central Bank has a keen interest in the determination of bank lending rates stemming from its roles which are outlined by the Bankers Association of Zimbabwe as: to implement monetary policy, to determine interest rates, to control the nation’s entire money supply, to regulate and supervise the banking industry as well as to set the official interest rate used to manage both inflation and the country’s exchange rate (www.baz.org accessed 14/12/2012). The RBZ has been among the players holding the view that the banking sector is extending credit at high bank lending rates in the multi-currency regime. This is noted in the Monetary Policy Statement January 2012, which stated that “Despite high lending rates charged by banks, savings and demand deposits, which constitute the bulk of the deposits, continue to attract low interest rates and high transaction charges” (p. 23).

Determination of bank lending rates is a problem prevalent largely to banking institutions since they represent the largest source of lending in the Zimbabwean economy. Other non-banking institutions involved in lending largely comprise microfinance institutions whose operations amount to insignificant levels to total lending in the economy. This is attributable to the view that microfinance institutions are not adequately capitalised as banks and most of them do not have large branch networks.
Table 1.2: Structure of the Banking Sector

<table>
<thead>
<tr>
<th>Type of Institution</th>
<th>Number</th>
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<tbody>
<tr>
<td>Commercial Banks</td>
<td>16</td>
</tr>
<tr>
<td>Merchant Banks</td>
<td>2</td>
</tr>
<tr>
<td>Building Societies</td>
<td>3</td>
</tr>
<tr>
<td>Savings Bank</td>
<td>1</td>
</tr>
<tr>
<td>Finance Houses</td>
<td>0</td>
</tr>
<tr>
<td>Discount Houses</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total Banking institutions</strong></td>
<td><strong>22</strong></td>
</tr>
</tbody>
</table>

Source: RBZ Monetary Policy Statement January 2013

As at 31 December 2012, the Zimbabwean economy comprised 22 banking institutions offering differentiated loan products in terms of interest rates, security, target market, tenor among other issues. The banking sector is dominated by few large banks making this to exhibit oligopolistic tendencies. Oligopolistic companies are not purely price takers as in perfectly competitive markets but possess some degree of power in terms of determination of prices of their goods and services.

Table 1.3: Minimum Capital requirements

<table>
<thead>
<tr>
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<th></th>
<th></th>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Commercial Banks</td>
<td>12.5 mil</td>
<td>25 mil</td>
<td>50 mil</td>
<td>75 mil</td>
<td>100 mil</td>
<td>109 mil</td>
</tr>
<tr>
<td>Merchant Banks</td>
<td>10 mil</td>
<td>25 mil</td>
<td>50 mil</td>
<td>75 mil</td>
<td>100 mil</td>
<td>109 mil</td>
</tr>
<tr>
<td>Building Societies</td>
<td>10 mil</td>
<td>20 mil</td>
<td>40 mil</td>
<td>60 mil</td>
<td>80 mil</td>
<td>80 mil</td>
</tr>
<tr>
<td>Finance Houses</td>
<td>7.5 mil</td>
<td>15 mil</td>
<td>30 mil</td>
<td>45 mil</td>
<td>60 mil</td>
<td>59 mil</td>
</tr>
<tr>
<td>Discount Houses</td>
<td>7.5 mil</td>
<td>15 mil</td>
<td>30 mil</td>
<td>45 mil</td>
<td>60 mil</td>
<td>59 mil</td>
</tr>
<tr>
<td>Micro-finance Banks</td>
<td>1 mil</td>
<td>1.25 mil</td>
<td>2.5 mil</td>
<td>3/5 mil</td>
<td>3 mil</td>
<td>3 mil</td>
</tr>
<tr>
<td>Micro-finance Institutions</td>
<td>5 000</td>
<td>10 000</td>
<td>15 000</td>
<td>20 000</td>
<td>25 000</td>
<td>25 000</td>
</tr>
</tbody>
</table>

Source: Ministry of Finance 2012

The Banking industry is a highly regulated sector in the economy. RBZ in order to ensure that the banking sector remains stable and sound introduced new minimum
capital requirements in 2012. These new minimum capital requirements are to be complied with on a six months phased basis, with the first period being 31 December 2012. Levels of minimum capital requirements are to be 25%, 50%, 75% and 100% (full compliance expected 30 June 2014).

![Lending Rates Diagram](image)

Figure 1.1: Average lending rates of Commercial and Merchant Banks, Source: Ministry of Finance 2012

The diagram above depicts the movement of the weighted lending rates classified as commercial and merchant bank from the period December 2011 to May 2012. It can be noted that after the first quarter of 2012, rates experienced a drop. The drop in lending rates resulted from improving liquidity conditions in the market. A number of reasons could explain the drop, with the major contributor being high liquidity challenges that characterized the period from December 2011 to February 2012. This period saw a number of banks failing to process payments in time and setting limits on daily cash withdrawal amounts. Another reason that caused the drop could be that NSSA, a major player on the financial market, was forced by government to lend at 10%.
Table 1.4: Weighted Average Base Lending Rates June 2011- June 2012

<table>
<thead>
<tr>
<th>Month</th>
<th>Commercial Bank Average Base Lending Rate</th>
<th>Commercial Bank Weighted Average Base Lending Rate</th>
<th>Merchant Bank Average Base Lending Rate</th>
<th>Merchant Bank Weighted Average Base Lending Rate</th>
<th>4 Month Deposit Rate</th>
<th>Savings Deposit Rate</th>
<th>Annual Inflation</th>
<th>Real Savings Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jun-11</td>
<td>8.00-30.00</td>
<td>11.2</td>
<td>16.00-32.00</td>
<td>17.3</td>
<td>8.6</td>
<td>2.6</td>
<td>2.9</td>
<td>-0.3</td>
</tr>
<tr>
<td>Jul-11</td>
<td>8.00-30.00</td>
<td>11.0</td>
<td>16.00-32.00</td>
<td>18.2</td>
<td>8.6</td>
<td>2.6</td>
<td>3.3</td>
<td>-0.7</td>
</tr>
<tr>
<td>Aug-11</td>
<td>8.00-30.00</td>
<td>12.1</td>
<td>16.00-32.00</td>
<td>18.9</td>
<td>8.6</td>
<td>2.6</td>
<td>3.5</td>
<td>-0.9</td>
</tr>
<tr>
<td>Sep-11</td>
<td>8.00-30.00</td>
<td>12.6</td>
<td>16.00-32.00</td>
<td>19.6</td>
<td>8.6</td>
<td>2.6</td>
<td>4.3</td>
<td>-1.7</td>
</tr>
<tr>
<td>Oct-11</td>
<td>8.00-30.00</td>
<td>13.2</td>
<td>15.00-32.00</td>
<td>19.6</td>
<td>8.6</td>
<td>2.6</td>
<td>4.2</td>
<td>-1.6</td>
</tr>
<tr>
<td>Nov-11</td>
<td>8.00-30.00</td>
<td>13.2</td>
<td>10.00-32.00</td>
<td>19.6</td>
<td>8.3</td>
<td>2.6</td>
<td>4.2</td>
<td>-1.6</td>
</tr>
<tr>
<td>Dec-11</td>
<td>8.00-30.00</td>
<td>13.2</td>
<td>10.00-32.00</td>
<td>19.6</td>
<td>9.1</td>
<td>2.6</td>
<td>4.9</td>
<td>-2.3</td>
</tr>
<tr>
<td>Jan-12</td>
<td>8.00-30.00</td>
<td>13.2</td>
<td>10.00-32.00</td>
<td>19.6</td>
<td>9.1</td>
<td>2.6</td>
<td>4.3</td>
<td>-1.7</td>
</tr>
<tr>
<td>Feb-12</td>
<td>8.00-30.00</td>
<td>14.0</td>
<td>10.00-32.00</td>
<td>20.1</td>
<td>9.1</td>
<td>2.6</td>
<td>4.3</td>
<td>-1.7</td>
</tr>
<tr>
<td>Mar-12</td>
<td>8.00-30.00</td>
<td>10.6</td>
<td>14.00-35.00</td>
<td>18.8</td>
<td>10.1</td>
<td>6.0</td>
<td>4.0</td>
<td>2.0</td>
</tr>
<tr>
<td>Apr-12</td>
<td>8.00-30.00</td>
<td>9.0</td>
<td>13.00-25.00</td>
<td>15.7</td>
<td>10.1</td>
<td>6.0</td>
<td>4.3</td>
<td>2.0</td>
</tr>
<tr>
<td>May-12</td>
<td>6.00-30.00</td>
<td>9.4</td>
<td>15.00-30.00</td>
<td>14.4</td>
<td>10.1</td>
<td>6.0</td>
<td>4.0</td>
<td>2.0</td>
</tr>
<tr>
<td>Jun-12</td>
<td>6.00-35.00</td>
<td>9.7</td>
<td>15.00-30.00</td>
<td>14.5</td>
<td>10.1</td>
<td>6.0</td>
<td>3.9</td>
<td>2.1</td>
</tr>
</tbody>
</table>

Average ... 11.9 ... 18.8 9.1 3.5 4 -0.4

Source: Reserve Bank of Zimbabwe Monthly Economic Review August 2012

The figure above illustrates that the local banking sector has witnessed higher lending rates being charged by merchant banks as compared to the commercial banks. The gap between merchant bank lending rates and commercial bank lending rates is to cater for the extra risk and difference in cost of funding structures associated with merchant banks.
Table 1.5: Weighted average lending rates classified as individual and corporate

| End Period | Commercial Banks | | | Merchant Banks | | |
|------------|------------------|------------------|------------------|------------------|------------------|
|            | Nominal Lending | Weighted Average | Nominal Lending | Weighted Average |
|            | Rates**          | Lending Rates**  | Rates**          | Lending Rates**  |
|            | Individuals      | Corporate        | Individuals      | Corporate        |
| 2012       |                  |                  |                  |                  |
| Mar        | 8.00-30.00       | 16.04            | 12.53            | 14.00-35.00      | 18.17            | 13.26            |
| Apr        | 8.00-30.00       | 15.00            | 13.06            | 13.00-25.00      | 18.37            | 16.36            |
| May        | 6.00-30.00       | 14.98            | 11.86            | 15.00-30.00      | 15.78            | 14.47            |
| Jun        | 6.00-35.00       | 13.81            | 11.58            | 15.00-30.00      | 17.86            | 14.05            |
| Jul        | 6.00-35.00       | 14.32            | 10.88            | 15.00-30.00      | 17.92            | 13.93            |
| Aug        | 6.00-35.00       | 15.65            | 10.74            | 15.00-30.00      | 17.94            | 13.95            |
| Sep        | 6.00-35.00       | 13.25            | 11.14            | 15.00-30.00      | 17.98            | 13.92            |
| Oct        | 6.00-35.00       | 13.35            | 11.03            | 13.00-30.00      | 17.98            | 13.95            |
| Nov        | 6.00-35.00       | 15.25            | 10.88            | 13.00-25.00      | 17.91            | 14.42            |

Source: RBZ Monthly Economic Review November 2012

From the diagram above, it can be noted that individuals are charged relatively higher average lending rates due to the high risk premium as compared to corporates. The other reason to support for the slightly higher average lending rates is the need to discourage consumptive borrowing and channel funds and resources into productive usage.

Figure1.2: Comparison of deposit rates and lending rates, Source: RBZ (2013)
For the period from January 2012 to December 2012, lending rates were quoted between 6% and 35%, whilst demand deposit interest payable was averaging between 0 to 5%, which results in a large spread of maximum 20% (RBZ, 2013). The majority of deposits in the economy are demand and transitory in nature, and cannot attract high deposit rates as levied on fixed deposits. Huge spreads between deposits and lending rates are reflective of high loan interest rates. The outcry on exorbitant bank lending rates in Zimbabwe has been also premised on the gap between deposits rates and loan rates. Jefferis (2009) noted that wide spreads partly reflects the high cost base of the banking system. The gap between lending rates and cost of funds is another measure that shows how expensive the average loan interest rates are. The interest rate spread is affected by several factors chief among them is the nature of competition in the loan market. Higher spreads indicate that there are other significant contributing factors to determination of lending rates other than the cost of funding. A loan market that exhibits stiff level of competition is normally associated with smaller spreads and vice versa for markets with less level of competition. Large margins in a highly competitive banking environment will result in outpricing of a bank’s loan products. Borrowers prefer lower lending rates to high lending rates, holding all other things constant. Where there is a high level of competition banks compete for borrowers, thereby are forced to lower their spreads.

Figure 1.3: Linking inflation to lending rates, Source: RBZ (2011)
The Zimbabwe banking sector has witnessed huge gaps between lending rates and inflation levels as illustrated in the diagram above. This situation emphasizes that a number of variables are playing more significant roles in the determination of lending rates in Zimbabwe under the multi-currency regime other than inflation. It is important for this study to analyse these other variables that are causing the existence of the huge gaps.

The hyperinflationary period in Zimbabwe that was mainly experienced between the period beginning 2000 to end of 2008, resulted in the erosion of the public’s banking confidence. During this period it was difficult to access deposits from accounts, due to cash shortages, whilst money lost its value rapidly, wiping bank deposits in the process. This era saw the destruction of the savings culture which problem has been inherited in the multi-currency period, leading to large sums of money circulating in the informal sector. An estimated $2 billion is thought to be circulating outside formal banking channels. (www.kenyacentral.com). This position has a negative impact on the money supply in the economy by affecting banks’ liquidity levels. If these huge sums of money find their way into the official system, deposits would force lending rates to experience a dip due to the availability of more funds for onlending. Despite the existence of the informal market for deposits, the Zimbabwean banking industry has witnessed a growth in advances and deposits. Since the beginning of the multi-currency system, total advances and deposits have grown from $79.6 million and $297.6 million to $3.5 billion and $4.4 billion respectively as at 31 December 2012 (RBZ, 2012). The growth in the economy’s advances and deposits resulted in increasing advances to deposits ratio which started low at around 30% when multi-currency system was implemented to an average of 80%. With continued advances growth, the significance of determination of lending rates becomes more pronounced and more relevant. The growth in advances and deposits is illustrated in the diagram below.
Though loans and advances level/base has continued to grow as exhibited above, the majority of these banking sector loans are of a short term nature. This has been caused by the nature of deposits that are short term and transitory in nature. According to Business Monitor International Report (2010) it states that “Despite rising deposits levels on the back of increased confidence in the financial sector, lending from Zimbabwean banks remains constrained by a shortage of long-term deposits, lack of acceptable collateral, the absence of a lender of last resort and high operating costs”.

Due to liquidity constraints the majority of deposits are short term and transitory in nature, and this had led the banking sector to offer mainly short term loans. This situation indicates shortage of sources of funds to finance long term loans in the banking sector under the multi-currency regime.

The Ministry of Finance (2012) as part of government initiatives made a proposal directing all the banking institutions to establish a memorandum of understanding with RBZ to the effect of addressing exorbitant charges on transactions and loans. The major suppliers of funds in the Zimbabwean economy are Old Mutual and NSSA.
and part of the strategy to wrestle high lending rates was for the RBZ and Ministry of Finance to negotiate with these two for the reduction of cost of funds. Old Mutual and NSSA reduced the cost of money lent to banks from 10% to 7% in January 2013 (www.securitiesafrica.com). This is likely to have a trickledown effect on the cost of funds to the general public and industry expectations are that weighted average lending rates may fall to 10% from 15% per annum. Such a move would act positively towards repayment capacities of borrowers.

It is viewed by the Government and RBZ that in order to promote financial inclusion, stability and economic growth, bank charges and lending rates are a key ingredient and ought to be supportive. Zimbabwe banking institutions showed preparedness to lower rates and bank charges in a manner which does not compromise the financial stability of the institutions by sealing an agreement with the RBZ to slash lending rates and bank charges. This agreement is with effect from 1 February 2013 and was made between 22 banking institutions and the RBZ. It is stated in the agreement that lending rates cannot be more than 12.5 percentage points above the bank’s weighted average lending cost of funds, which currently ranges between 1% and 7% while banks charge lending rates of as much as 25% (RBZ, 2013).

A position held by the banking sector before the memorandum of understanding reveals, that the consensus was that lending rates are fair as indicated by the Bankers Association of Zimbabwe (BAZ) president’s argument published in the Zimbabwe Independent newspaper dated August 17 to 23 2012 that “interest rates charged by banks were fair, competitive and in line with the prevailing money market conditions” (p.2). The basis of the BAZ position on interest rates charged by banks was premised on the view that the rates are reflective of economic fundamentals and conditions prevailing under the multi-currency regime in Zimbabwe. Such conditions include high risk premium, high cost of funding, high cost of capital and high operating costs. Included in high operating costs are costs associated with the collection and recovery of the loans and advances.
1.1.2 IMPORTANCE OF DETERMINATION OF BANK LENDING RATES

Determination of bank lending rates is important for a number of reasons, with the major ones discussed below. Most businesses in Zimbabwe require debt to finance working capital and fixed assets. The situation in Zimbabwe under the multi-currency period reflects low capacity utilization levels as reported by Confederation of Zimbabwe Industry survey reports. Such low capacity utilization levels signal increased demand for companies to access capital. A business with low capacity utilization level portrays the existence of unutilized production capacity. In order to up production levels, there is need for organizations to consider sources of financing or funding. Under the multi-currency regime, organizations are facing difficulties to increase production through organic means due to the absence of or little retained earnings. The easiest route to increase capacity utilizations levels in the dollarized environment is to approach banking institutions for funding thus low capacity utilizations can trigger the need to borrow. RBZ (2011) points out that “Lending rates remained prohibitive to the productive sectors. The evidence of low capacity utilization levels means that organizations are failing to have access to sources of finance, due to primarily the high lending rates. This is supported by the Ministry of Finance that business continues to face limited access to capital (Ministry of Finance, 2012).

Table 1.6: Capacity utilisation levels from 2009 to 2012

<table>
<thead>
<tr>
<th>Year</th>
<th>Capacity utilization levels</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>32.3%</td>
</tr>
<tr>
<td>2010</td>
<td>43.7%</td>
</tr>
<tr>
<td>2011</td>
<td>57.2%</td>
</tr>
<tr>
<td>2012</td>
<td>45.2%</td>
</tr>
</tbody>
</table>


Fair pricing of loans products can only be achieved when the determination of bank lending rates is transparent and is supported by strong basis. The proper pricing of loans is critical to the going concern of the bank. Under pricing or over pricing of loans affects viability of banks in the form of lost business and revenue. Fair pricing
of loans would allow for optimal rates to prevail, thus improving affordability if the case that the current levels are exorbitant is correct. Fairly priced loans have a positive impact on a Bank’s operational expenses.

An investigation in the determination of Bank lending rates would be important to justify the level of profits made by banking institutions. The top five banks basing on profit after tax for the year ended 31 December 2011 were CBZ Bank $24.7m, Standard Chartered $22.0m, Stanbic Bank $11.1m, Banc ABC $7.3m and ZB Bank $5.7m as reported in various annual reports. It is very difficult for banking institutions to make profit and survive in business without maximizing on interest income under normal circumstances. Fair pricing is thus possible only where there is proper and appropriate determination of lending rates.

High lending rates result in the slowdown of a nation’s economic growth. This is supported by the work of Achler (1995) in a policy working research paper stating that “The high commercial lending rates Nicaragua is currently experiencing, together with a perceived scarcity of credit, have often been blamed for the country’s slow growth and have been considered a major failing of the adjustment program initiated in 1991”. Fair lending rates in an economy stimulate economic growth as businesses are able to access funds at affordable levels. The determination of bank lending rates is vital for the growth of Zimbabwe’s gross domestic product.

1.2 RESEARCH PROBLEM
Lending rates obtaining in Zimbabwe in the multi-currency regime are considered to be highly punitive by the Ministry of Finance, Reserve Bank of Zimbabwe, public and private borrowing community. This situation discourages borrowings by industry thus leading to low levels of economic activity. Industry is struggling to access loans due to the unsustainable cost of loans. Those that manage to get the loans are struggling to repay because of both the cost and short term nature of the facilities. In addition, high interest rates have led to huge loan impairments and non performing loans as borrowers fail to service their loans. Ministry of Finance (2012) states that
“consequently, non-performing loans increased from 7.55% in 2011 to 9.9% in June 2012 against the internationally accepted Basel II threshold of 5%” (p.97).

If this situation continues the banking sector will be exposed to operating losses, poor quality loan books and deteriorating balance sheets. Non-performing loans results in increased defaults which brew financial distress positions to the lender and borrower. A situation of increased defaults will give rise to liquidity constraints and insolvency challenges which ends up forcing banks to shut down. Ministry of Finance (2011) noted that “high interest rates are also a major factor behind most company closures”. Most bank failures have been caused by non-performing loans (Wei-Shong and Kuo-Chung, 2006).

1.3 RESEARCH OBJECTIVES

The objectives of this study are:

a. To find out the perception on level of bank lending rates obtaining in Zimbabwe’s multi-currency regime.

b. To find out whether these bank lending rates are optimal.

c. To ascertain the methods of determining lending rates in use in Zimbabwe’s multi-currency regime.

d. To propose an appropriate manner of determining bank lending rates as a way to ensure financial institutions are not exposed to over or under pricing negative effects.
1.4 RESEARCH QUESTIONS
The research questions of the study are:

a. What is the perception on current level of lending rates in Zimbabwe after dollarization
b. Are the bank lending rates charged in multi-currency period optimal
c. How are the bank lending rates being determined post dollarization in Zimbabwe
d. What model/(s) should be used to obtain fairly priced bank lending rates

1.5 RESEARCH PROPOSITION
To achieve the research study objectives stated above the following proposition has been developed

**Proposition**: The bank lending rates in Zimbabwe under the multi-currency regime are suboptimal.

1.6 JUSTIFICATION OF RESEARCH
The study findings will be beneficial to a number of stakeholders that include banking sector, Ministry of Finance, Reserve Bank of Zimbabwe, other policy makers, economists and borrowers both corporate and individual clients. The Banking sector would be presented with an alternative model on determination of bank lending rates in Zimbabwe under the multi-currency regime. Industry and policy makers will obtain a basis for qualifying policy measures and the researcher will benefit from broadening of academic knowledge through the rigorous stages of gathering data and literature review analysis.

1.7 SCOPE OF RESEARCH
The research is limited to banking institutions in Zimbabwe focusing on commercial banks, merchant banks, building societies, savings bank, policy makers mainly from Ministry of Finance and Reserve Bank of Zimbabwe as well as selected borrowers who reside in Harare.
1.8 DISSERTATION STRUCTURE
This research report is comprised of the following five chapters. Chapter 1 discussed the introduction of the whole study and also covered issues on research questions, objectives, scope and background of the study. Chapter 2 presented the review of literature on determination of bank lending rates in Zimbabwe under the multi-currency regime taking into consideration both theoretical and empirical studies. Chapter 3 discussed the steps followed in executing the research project. Areas covered in this chapter included research design and philosophy, target population and sample, data collection methods and research instruments. Justification of strategy and approaches was also covered. Chapter 4 presented research findings and results with the accompanying interpretations and discussions. Chapter 5 covered the conclusions on the research findings and key recommendations of the study.

1.9 CHAPTER SUMMARY
This chapter outlined the purpose of this research study as the determination of bank lending rates under the multi-currency regime in Zimbabwe, covering areas which include importance of determination of lending rates, research objectives and questions. The major driving factor of carrying out this research study has been discussed to centre on the general widespread outcry from both public and private sectors of the economy. It has also been highlighted in this chapter that the major problems emanating from exorbitant bank lending rates are exposure of banking institutions to poor quality loan books, growth in non performing loans leading to high impairments and deteriorating balance sheets.
CHAPTER TWO

LITERATURE REVIEW

2.0 INTRODUCTION

This chapter reviews literature on how lending rates are determined thus establishing the theoretical foundation of the research study. The major purposes of this chapter are to provide theoretical background knowledge to the research topic, to outline areas that have already been explored in the area of determination of bank lending rates together with the findings and recommendations, to detail relevant concepts to the research topic and to explore information that will build support to research methodology. It is arranged into three major sections namely 2.1, 2.2 and 2.3. Section 2.1 discusses the theoretical review of bank lending, section 2.2 deals with the empirical studies on lending rates, whilst the last section 2.3 summaries the chapter.

2.1 THEORETICAL LITERATURE REVIEW

This section discusses the theoretical review of bank lending rates under the following subsections: definition of terms, dollarization in terms of types, history and impacts on lending, credit market, lending process and activities, determination of lending rates and lending rates theories. The theoretical review will cover the complete loan administration cycle starting from the market conditions up to the settlement of the loan.

2.1.1 DEFINITION OF TERMS

Total bank deposits are defined as the sum of deposits in the domestic banking system plus cross-border deposits held by local residents in U.S. banks (Meredith et al., 2003). Bank deposits determine the level of liquidity in the economy. In Zimbabwe under the multi-currency regime total bank deposits are measured as the
total deposits in the banking sector which includes mainly commercial banks and building societies, whilst the money supply is defined as total banking sector deposits inclusive of interbank deposits (RBZ 2012)

According to (www.ehow.com), the nominal interest rate is defined as “the actual percentage used to calculate the interest that a financial product such as a savings account or certificate of deposit will yield”. It is the specified rate to be earned or paid on a financial product, for example, a loan stated to pay 10% interest will require interest payment of 10% over and above the principal amount. Nominal interest rates are considered static as interest rates are fixed at the time of initiation. Total repayment of loans will grow by the nominal interest rate. Brigham and Ehrhardt(2005) considers the nominal interest rate as the quoted rate on a given debt security which is made up of the real rate of interest plus the premium factor. The premium factor includes inflation and the following components in the equation below:

\[ r = r^* + IP + DRP + LP + MRP \]

where, \( r = \text{nominal rate of interest} \),

\[ r^* = \text{the real risk-free rate of interest} \]

\[ r_{RF} = r^* + IP = \text{the quoted risk free rate of interest} , \]

\[ IP = \text{inflation premium} \]

\[ DRP = \text{default risk premium} \]

\[ LP = \text{liquidity premium}, \]

\[ MRP = \text{maturity risk premium} \]

The real interest rate is defined as the “nominal rate minus inflation, (www.ehow.com)”. Technically, the real rate of interest is the nominal interest rate minus the expected future rate of inflation. Given a situation where a borrower
accesses a loan at a 10% interest rate and expected future inflation rate at 3.9%, this follows therefore that the real interest rate is equal to 6.1%. The real interest rate reflects the growth in purchasing power of funds advanced or lend. During times of rising inflation, real interest rates usually become negative, thus eroding financial positions of lenders. Vernimmen(2005) describes the relationship existing between real interest rates and nominal interests in the formula given below:

\[
\text{real interest rate} = \frac{1 + \text{Nominal interest rate}}{1 + \text{Inflation rate}} - 1
\]

The formula given above is the one which is used to derive the approximate real interest rate as being nominal interest rate minus inflation rate. It has been noted that the movements in the nominal interest rate are mostly emanating from changes in expected inflation (Kennedy, 2000). The focus of this research project is on nominal bank lending rates. Nominal lending rates are set and agreed before disbursement of funds/loan and form part of the loan contract. Brealey and Myers (1999) further illustrate the difference between the nominal and real interest rate by defining the nominal interest rate as “the rate you actually pay when you borrow money” and the real interest rate as “the theoretical rate you pay when you borrow money as determined, by supply and demand”.

Kennedy (2000) looks at another angle of differentiating between real and nominal interest rates by illustrating that “real interest rate affects aggregate demand for goods and services”, whilst “nominal interest rates affects the aggregate demand for money”. Kennedy (2000) further points out that the general assertion that higher interest rates will result in less borrowing by the both public and private is not always correct, this so because most people are willing to maintain borrowing levels or even to exceed for the sake of buying goods now. To obtain a more realistic implied real interest, the relationship of nominal interest and the real interest rate takes into cognisance the maximum expected inflation and actual inflation as shown in the equation below (Bacha, Holland and Gonçalves, 2007).
The diagram above depicts the relationship between nominal and real interest rates on the upward and downward yield curves. The upward sloping yield curve illustrates that future expected inflation premium is likely to be higher in the long term as compared to the short term period, whilst the opposite holds for the downward sloping yield curve where the future expected inflation premium over the long term will be comparably lower to the short term. The level of real rates is the same under both curves, showing that with a constant real lending rate, the difference in the nominal lending rate will only be influenced by inflation premium and interest rate risk premium. The higher the inflation premium and interest rate risk premium, the higher the nominal lending rate.

Figure 2.1: Nominal and real interest rate relationship, Source: Ross, Westerfield and Jordan 2002
The annual rate of inflation as measured by the consumer price index (CPI) has been reported in the single digit level averaging below 5% per annum since Zimbabwe engaged dollarization, as illustrated in part by the figure above. Given local average lending rates of around 17%, this indicates that the chief contributor to the nominal lending rates is not future expected inflation but actually the real lending rates. It is important therefore, to note that the real lending rates in Zimbabwe play a significant influence in the determination of the nominal lending rates.

Banks are usually defined by the nature of service they provide in the economy which is largely financial intermediation, hence are defined as financial intermediaries. (Ahmed, 2009) defines banks as “the vehicle for monetary policy signals, credit channel and facilitators of the payment system”. Following this definition if follows thus, that banking institutions implement monetary policy as dictated by the central banks, therefore influencing macroeconomic variables. Bank lending is one of the critical drivers to national production of goods and services affecting key sectors which include agriculture, manufacturing, distribution, construction, transport, mining, private and communication among others to enable economic development of a country (Ahmed, 2009). It’s not only the level of bank
lending that is important in affecting GDP, but also the targeted sectors for lending, tenor of the loan and the packaging of the loan in terms of the repayment terms.

The lending rate is the rate at which financial institutions lend money (www.fxstreet.com). Lending rate may also be defined as the rate of interest that you have to pay when you are repaying a loan Harper Collins Dictionary (2003). Cambridge University Press (2011) defines the lending rate as the rate of interest that a bank or other financial organization charges counterparties for borrowing money. Lending rate is the cost of borrowing money which is an annual percentage of the money paid to a lending institution over and above the principal amount. This research project defines bank nominal lending rate as the agreed rate between the borrower and the bank which is used for the purposes of rewarding the lender for providing funds. This rate becomes the basis for computing interest payments.

Multi-currency is the term used to describe a variety of different currencies involving more than one currency(www.firstatlanticcommerce.com). With multi-currency system, a number of currencies are allowed to circulate as legal tender in the economy and become acceptable in the payment systems. Transactions under a multi-currency economy will be carried out using more than one currency, although a single currency may occupy the lion’s share in terms of volume of transactions.

2.1.2 DOLLARIZATION
The twenty century era has to a large extent been driven by rampantcontinuous improvement in technology which has resulted in increased globalization. This has impacted both negatively and positively on the manner businesses are operated, as the world has become one “global village”. There are more forces today bringing countries close to one another through increased trade, bilateral agreements, regionalism and common currency usage. Zimbabwe has joined a number of other countries that have gone the route of dollarization. Dollarization is associated with both pros and cons, some of which impact on the determination of bank lending rates. Beckerman (2001) states that “It stands to reason that dollarization has gone
furthest in economies with long inflation histories, such as Argentina, Bolivia, Perú, and Ecuador”. Most countries that have chosen the route of dollarization are mostly emerging markets that exhibit records of unstable macroeconomic conditions (Loiseau-Aslanidi, 2012). Dollarization by itself is not able to solve the fundamental problems that lead to poor performance of key macroeconomic variables, although it maybe a solution to financial instability. Dollarization is considered another form of fixed exchange rate as a result of the failure to manage exchange ratesafter adopting a currency that is not domestic (Schuler, 2005).

Dollarization is an act whereby a country adopts one or more foreign currencies as legal tender, in full or partial replacement of the local currency (Menon, 2008 and Reserve Bank of Atlanta, 2006). In most cases, dollarization takes place in a situation where the country’s local currency has displayed challenges in fulfilling the functions of money. These functions include store of value, medium of exchange and unit of account. Dollarization has witnessed a continued increasing usage by a number of economies (World Bank, 2002). Different countries dollarize due to different forces, as seen in the case of El Salvador which adopted dollarization effective 1 January 2001 not as a remedial action to a financial or monetary crisis as its economy was stable with an average annual inflation rate of 2 -3% per annum but was due to a different need (Hinds, 2004).

2.1.2.1 HISTROY OF MULTI-CURRENCY REGIMES
A study done by Cohen (2001) reveals that seventeen countries were “either dollarized or near dollarized”, at the end of 2001. Near dollarization is a state of partial dollarization which is evident in that the local currency is allowed to circulate along the adopted foreign currency. The history of dollarization goes way back as early as 1794 with Indonesia being one of the early pacesetters of this system. Since the early engagers of dollarization, a number of countries from different continents have followed suit with Latin American countries and third world economies dominating in this race.
<table>
<thead>
<tr>
<th>Country</th>
<th>Period</th>
<th>Country</th>
<th>Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Samoa</td>
<td>?–present</td>
<td>Dominica</td>
<td>1938–1951</td>
</tr>
<tr>
<td>Albania*</td>
<td>1912–1925</td>
<td>Dominican Republic*</td>
<td>1899–1947</td>
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<tr>
<td>Andorra*</td>
<td>?–present</td>
<td>East Timor*</td>
<td>2000–present</td>
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<tr>
<td>Anguilla</td>
<td>1938–1951</td>
<td>Ecuador*</td>
<td>2000–present</td>
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<tr>
<td>Antigua and Barbuda</td>
<td>1938–1951</td>
<td>Egypt*</td>
<td>1856–1898</td>
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<td></td>
<td></td>
<td></td>
<td>1800s–1969</td>
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<tr>
<td>Botswana*</td>
<td>1950–1976</td>
<td>Eritrea</td>
<td>~1900–1952</td>
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<td></td>
<td></td>
<td></td>
<td>1962–1993</td>
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<tr>
<td>British Indian Ocean</td>
<td>1919–present</td>
<td>Gambia</td>
<td>1902–1913</td>
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<tr>
<td>Territory</td>
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<tr>
<td>British Virgin Islands</td>
<td>1973–present</td>
<td>Ghana</td>
<td>1896–1913</td>
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<tr>
<td>Brunei*</td>
<td>1945–1951</td>
<td>Gibraltar</td>
<td>1888–1927</td>
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<tr>
<td>Cameroon</td>
<td>By 1910–1916</td>
<td>Grenada</td>
<td>1938–1951</td>
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<tr>
<td>Cayman Islands</td>
<td>?–1972</td>
<td>Guam</td>
<td>?–present</td>
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<tr>
<td>Christmas Island</td>
<td>?–present</td>
<td>Honduras*</td>
<td>1912–1950</td>
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<tr>
<td>Cocos Islands</td>
<td>?–present</td>
<td>Indonesia</td>
<td>1794–1807</td>
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<td></td>
<td>1995–present</td>
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<tr>
<td>Comoros</td>
<td>1885–1926</td>
<td>Israel</td>
<td>1917–1927</td>
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<tr>
<td>Cuba*</td>
<td>1902–1934</td>
<td>Jordan</td>
<td>1917–1927</td>
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<tr>
<td>Cyprus</td>
<td>1880s–1914</td>
<td>Kenya</td>
<td>1896–1898</td>
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<tr>
<td>Cyprus, Northern*</td>
<td>1974–present</td>
<td>Kiribati*</td>
<td>1930s–present</td>
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<td>Kosovo</td>
<td>1999–present</td>
<td>Namibia*</td>
<td>1906–1914</td>
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<tr>
<td>Lesotho*</td>
<td>1921–1980</td>
<td>Nauru*</td>
<td>1968–present</td>
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<td>Liechtenstein*</td>
<td>?–present</td>
<td>Nepal*</td>
<td>1937–1945</td>
</tr>
<tr>
<td>Liberia*</td>
<td>1880s–1985</td>
<td>Nigeria</td>
<td>1891–1913</td>
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<tr>
<td>Libya</td>
<td>1912–1943</td>
<td>Niue</td>
<td>1988–present</td>
</tr>
<tr>
<td>Madagascar*</td>
<td>1886–1926</td>
<td>Norfolk Island</td>
<td>?–present</td>
</tr>
<tr>
<td>Malaysia</td>
<td>1849–1888</td>
<td>Northern Mariana Islands</td>
<td>?–present</td>
</tr>
<tr>
<td>Malta</td>
<td>1903–1939</td>
<td>Palau*</td>
<td>?–present</td>
</tr>
<tr>
<td>Marshall Islands</td>
<td>1961–present</td>
<td>Panama*</td>
<td>1903–present</td>
</tr>
<tr>
<td>Micronesia*</td>
<td>?–present</td>
<td>Peru*</td>
<td>1887–1914</td>
</tr>
<tr>
<td>Monaco*</td>
<td>1865–present</td>
<td>Pitcairn Islands</td>
<td>1800s–present</td>
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</table>
The above table shows the different number of countries worldwide that have engaged dollarization at some stage in their history of existence. Some countries that adopted dollarization have been able to come out of dollarization through undergoing de-dollarization process; whilst about 32 countries have reportedly remained under dollarization as at end of 2004 (Schuler, 2005). About nineteen African countries have experienced dollarization at some point, and Zimbabwe is one of the few countries if not the only one that is currently under dollarization, a sign that indicates that African countries value national sovereignty more and they are quick to de-dollarize in the event of going the route of dollarization.

### 2.1.2.2 TYPES OF DOLLARIZATION

Dollarization occurs when a country replaces its local currency with a foreign currency and is normally split into two categories namely, official and unofficial (Hinds, 2004 and Levy-Yeyati, 2006). Official dollarization is also termed full...
dollarization entails the complete surrender of the local currency in favour of the foreign currency which becomes the exclusive legal tender, a situation that usual takes place through the government’s directive (Reserve Bank of Atlanta, 2006 and Levy-Yeyati , 2006 ). Official dollarization stands in the same light as pegging of the local currency to the adopted currency (which may be the United States Dollar), but differs from a currency board due to the fact that it cannot be reversed, thus making full dollarization a credible economic policy in dealing with currency and balance of payments crises (Reserve Bank of Atlanta, 2006).

There must be certain initial conditions that have to prevail for the successful implementation of official dollarization, chief amongst them being, openness and close trade ties and small relativeto the country whose currency is being adopted, this is evidenced by the fact that most countries that have adopted full dollarization have an average gross domestic product (GDP) of $11 billion (in 2000 dollars) and an average population of 7 million in 2004 (Minda ,2005 and Edwards and Magendzo ,2006).

Unofficial dollarization is also known as partial (defacto) dollarization and happens when a country remains recognizing the domestic currency as legal tender circulating parallel to the foreign currency, thus resulting in a multi-currency system or bi-currency system ( Levy-Yeyati ,2006), Ize and Levy-Yeyati (1998) explain the behavior of banks and depositors under dollarization by assuming that they both need to minimize portfolio returns variance through holding both foreign currency and local currency as means of hedging against inflation and exchange rate risks to achieve positive returns. The evidence obtained from the work of Ize and Levy-Yeyati (1998) revealsthat equilibrium dollarization of different borrowers will fluctuate about the dollarization level where portfolio variance is at its lowest, thus influencing a country’s dollarization level.

The sub branches of unofficial dollarization are identified as currency or payments dollarization (currency substitution), real dollarization and financial dollarization (asset substitution). Currency substitution entails the usage of foreign
currency alongside the domestic currency for transactions purposes as a medium of exchange, real dollarization is where a country officially or unofficially indexes prices and wages to the foreign currency which may be United States Dollar, whilst asset substitution involves the scenario holding of financial assets and financial liabilities denominated in foreign currency such as deposits, loans and other financial contracts by nationals (Reserve Bank of Atlanta, 2006, Corrado 2008 and Levy-Yeyati, 2006).

2.1.2.3 IMPACTS OF DOLLARIZATION ON DETERMINATION OF BANK LENDING RATES

Hinds (2004) identifies three different sides with reference to impacts on dollarization, which are trade, financial and fiscal. These three sides are discussed in the paragraphs below:

Under dollarization, the foreign currency adopted is deemed to be private property rather than property of the government (Schuler 1998). A private property gives the owner full rights and obligations, which is not the same with public property. By choosing the dollarization route a country will have limited rights and obligations on the adopted currency. The currencies circulating in Zimbabwe under the multi-currency regime remain the property of different governments namely United States of America, South Africa, Botswana being the owners of the major currencies circulating. The advantage of owning the currency comes through seignorage revenue. When a country engages a foreign currency by dollarizing there is loss of seignorage revenue (Menon, 2008 and Smith 2001). Lost seignorage revenue on the fiscal side is a disadvantage brought about by dollarization. This lost revenue comes in the form of tax on the demand of the local currency by issuing domestic currency such that a government is forced to consider other alternative sources of revenue or cutting government expenditure (Reserve Bank of Atlanta, 2006 and Larraín b. and Tavares, 2003). The demand of a country’s currency forces, governments to print money at zero cost literally, but will derive revenue and value through its sell. Seignorage revenue normally finds its way into the banking sector increasing the capacity of banks to fund the borrowing community.
Financial sovereignty is lost under multi-currency regime, thus leading to a position where a country’s domestic monetary policy is no longer determined by its central bank (Berrrios, 2006 and Smith 2001). A country without its own currency loses an independent monetary policy (Larraín b. and Tavares, 2003). The Central Bank’s inability to conduct an independent monetary policy will mean reliance on borrowed monetary policy. Dollarization raises a number of worries to policymakers, where its impact complicates and reduces the effects of domestic monetary and fiscal policies which is tantamount to giving up monetary and exchange rate policies (Loiseau-Aslanidi, 2012). Dollarization results in a country losing control over money supply in the economy. Under such circumstances a country through its central bank is unable to influence or determine interest rates as well as exchange rates. The multi-currency regime in Zimbabwe has witnessed the United States’s monetary policy becoming more important to the economy as the greenback (US$) is the most widely used currency in terms of the volume of transactions (Noko, 2011).

Dollarization brings inflexibility to the trade side as it becomes difficult for a country to manage its exchange rate through devaluation in order to increase export competitiveness at the expense of imports (Hinds, 2004). An economy under dollarization has no capacity to devalue the adopted currency as an adjustment mechanism. Dollarized countries have no option to increase export competitiveness through devaluing the currency. Devaluation is important to the extent that it promotes exports, while discouraging imports and is an indicator to the level of determining exchange rates in the economy which may be strategic for national policies. Losing control to manage exports creates vulnerability to an economy as it fails to protect local industries. Levy-Yeyati(2004) supports the view of vulnerability of economies by outlining that dollarization has a deleterious impact on financial fragility. DeNicolo’, Honohan and Ize 2003 points out that the more dollarized the system becomes, the more riskier it becomes as such economies will be subjected to greater vulnerability.
The central cost on the financial side is that a central bank will be unable to print money and to influence the currency price, thus leading to a position where the central bank is unable to insulate direct infiltration of international market forces into the local market (Hinds, 2004). Quantitative easing is not possible under a dollarized economy, leaving the RBZ with a position where it cannot print money (Larraín and Tavares, 2003). A central bank under dollarization however can be in a position to exercise lender of last resort functionality provided it is well funded mainly by the government. The lender of last resort functionality has a strong bearing in reflecting a central bank’s ability to provide liquidity to banking institution players in the economy and thus important in determination of bank lending rates. Dollarization breeds a situation where a country relies more on remittances, an example of El Salvador, which exhibits more significant dependence on remittances as compared to countries using their own currencies (Castillo-Ponce, Torres-Preciado and Manzanares-Rivera, 2011).

In the case of Zimbabwe economy lending practice has been shaped by the absence of an active money market and central bank’s role of lender of last resort, thereby reducing financial deepening. Presence of lender of last resort functionality is important in maintaining lending rates lower compared to when it is absent. Banks facing short positions due to shortage of liquidity to meet the liabilities demands will not be required to access deposits/funds from expensive sources wanting to take advantage of their situation. Corporates and institutions are usually not willing and prepared to meet the Banks’ short positions at prevailing money market rates, but need inducement of higher rates so as to bail the banks from the short positions. Banks will then adjust their lending rates in line with developments in money market rates, although the pass-through process is not immediate (Santos and Castro, 2010). Money market rates play an important role on determination of bank lending rates. High rates that obtain in the money market will translate to high cost of funding on banks, thus will eventually culminate in an increase of bank lending rates.
The positive impacts of dollarization on the Zimbabwe economy have been the following: to overcome hyperinflation, restoration of economic and price stability, improved budgetary discipline, restoration of monetary credibility, though foreign and financial support remained weak and subdued as a result of observed violation of property rights (Noko, 2011). Lending rates in Zimbabwe under the multi-currency regime have depicted some stability albeit at levels perceived expensive/exorbitant. Prior to the dollarization era lending rates were continuously revised in line with the hyperinflationary environment. Most banking institutions left lending since it was no longer profitable as lending rates failed to move at the same pace with inflation and engaged in non-core banking activities in order to hedge themselves against inflation.

The advantages of dollarization are manifold and include the following; reduced capital outflow due to nonexistent fears of devaluation, increased commercial integration, discipline on the part of government, increased stability and certainty, elimination of exchange risk, reduction of country risk premium, relatively low bank lending rates, control and reduction of inflation and reduction in currency risk, (Berg and Borenszein 2003, Chang 2000, Reserve Bank of Atlanta, 2006, Sachs and Larrain 1999, Larraín b. and Tavares, 2003, Menon 2008 and Berrios 2006). The above mentioned advantages are good recipe for foreign investment which includes foreign direct investment and foreign investment portfolio, which help in guarantying a stable capital flow to the country that has engaged foreign currency. Improved foreign investment will translate into automatic growth of money supply, which in turn will impact positively on the determination of lending rates. An economy under full dollarization enjoys a shield in terms of a currency or balance of payments crisis. The full dollarization option will however not be strong enough to shield the economy against banking crisis due to financial instability (Reserve Bank of Atlanta, 2006).

Dollarization will reduce costs of trade due to the sharing of a common currency which increases the volume of trade dramatically and commercial integration with the rest of the world becomes less friction (Harper, Harper, and Coronel, 2002).
Reduction of trade and transactions costs is a trigger to the cost of accessing offshore lines of credit in the banking sector. Dollarization will result in lower trade and transactions costs when accessing the offshore lines of credit. Availability of the offshore lines of credit is one area which has an impact on the determination of bank lending rates. If offshore lines of credit are easily accessible without frictions and lesser cost this will result in increased financial capacity of banks to onlend to the economy. Banking institutions’ solvency and liquidity improves as a result of dollarization (Bailey, 2007).

Dollarization is advantageous to the effect that long term competitiveness of a country is increased through provision of credible and stable currency, reduction in transaction costs, elimination of the risk to devalue, reduction of effective cost of capital, affordable low interest rates, provision of access to resources in international markets and reduction of financial crises risk (Hinds, 2004). This is supported by the work of Reserve Bank of Atlanta (2006) who states that “by giving up control of its money supply, a full dollarization regime encourages fiscal discipline”. It can be noted that dollarization should impose fiscal discipline but recent Zimbabwe experience on the $100 million loan from South Africa, the loans floated to NSSA and Old Mutual show that governments will still find a way around this constraint. Dollarization provide for increased banking sector confidence than in a not dollarized economy where the local currency is weak and suffering from hyper inflationary effects. To this end this makes bank runs less likely as bank runs are mostly associated with diminished bank confidence. Moral hazard reduction is one of the characteristics of dollarization (Reserve Bank of Atlanta, 2006).

There is no general consensus as far as dollarization impacts on real economic variables are concerned; such economic variables include growth, employment, and volatility, where one school of thought advocating for dollarization argues that dollarization increase growth through either reduced interest rates, higher investment and faster growth or through trade channel following elimination of currency risk (Edwards and Magendzo, 2006). It has been widely observed that
dollarization results in the reduction of bank lending rates in economies that were facing economic challenges and in hyperinflation mode. This same aspect has been observed in the multi-currency situation in Zimbabwe where the interest rates in absolute terms have climbed down from hyperinflation levels prior dollarization, but however dollarization has led to much higher interest rates in Zimbabwe in real terms.

2.1.3 CREDIT MARKET

A credit market is a place where those demanding credit and those supplying credit meet. The evolution of bank lending theoretically results from the interaction between demand and supply factors. It can be noted that the structure and depth of money markets is important in describing level of lending activity. A number of factors affect the structure of the credit market, such as banking competition, size of banks, level of development of financial markets, and even aspects affecting each single customer or credit transaction (Aristei and Gallo, 2012). The major participants in the credit market in Zimbabwe’s multi-currency regime are the banking institutions and the borrowers as government through the central bank can not significantly shape events due to the effects of dollarization.
The credit market is affected by factors both at endogenous and exogenous level. The endogenous factors include government, which require lending to improve its fiscal space, RBZ which is supposed to be controlling money supply in the economy and setting of required statutory reserves, depositors who provide the funding to banks and firms demand funds for borrowing. The exogenous factors include offshore lines of credits which provide banks with borrowing opportunities, world interest and deposit rates has an impact through the interest rate parity to influence determination of bank lending rates and foreign borrowers who demand funding/finance from the local,
The different types of borrowers existing in a market are associated with varying levels of risk which is partly defined from the project funding cycle. The project funding cycle indicates that green field projects (introduction stage) have higher risk as compared to corporate lending who are well established. If the majority of the bank’s loan portfolio is made up of borrowers in the lower stages of the project life cycle, the resultant will be high average lending rates. RAI (2010), supports the project funding cycle by stating that the lending rate depends on the risk premium based on the borrower’s credit worthiness and the risk of the venture being financed.

Capital requirements and cost of capital are critical in the determination of lending rates.

The Basel Committee (BCBS, 2010c) states that higher capital requirements makes it more expensive for banks to fund their operations, resulting with those costs being passed on to the borrowers through higher lending rates. To properly determine bank lending rates under the multi-currency regime in Zimbabwe, the contributory role of capital requirements cost will be necessary for the research study.

2.1.4 LENDING PROCESS AND ACTIVITIES

It is important to analyse the lending process to come up with the activities that consume resources and costs. Such a lending process may not be uniform across
the divide, with differences observed from one bank to the other, country to country and region to region. Some lending process may be thorough whilst others are not. A standard lending process is comprised of eight key activities which are application, credit analysis, decision, document preparation, closing, recording, servicing and administration and collection (Wei-Shong and Kuo-Chung, 2006).

Part of the lending process involves credit assessment of clients to establish the level of lending rates commensurate to each specific client. Banks charge different lending rates to different clients based on creditworthiness which is obtained from the individual assessments. The interest rate is based on the estimated risk of a particular borrower (Wei-Shong and Kuo – Chung, 2006)

The level of creditworthiness of borrowers is correlated to a default risk premium. To properly price the loan, this default risk premium forms part of the lending rate. The credit assessments done in the lending process takes into consideration a number of activities. These activities are summarized by the seven Cs mnemonic according to Subrahmanyam (2008) who states that banks consider the seven Cs—Capital, Capacity, Collateral, Conditions, Competition, Customer relationship and Character in credit assessment to derive specific client lending rates. Availability of information that is accurate is important for credit assessment of borrowers and hence lending rates. Banks acknowledges that asymmetric information results in costs that have to be factored in the determination of bank lending rates. Asymmetric information costs give rise to problems of adverse selection and moral hazard in setting of lending rates by banks, (Stiglitz and Weiss, 1981). These costs arise when banks approve uncreditworthy clients instead of the less risk clients or when banks disburse funds which would then be diverted by counterparty for other purposes.

2.1.5 DETERMINATION OF LENDING RATES

This section will discuss the determinants of lending rates in a multi currency economy, focusing largely on the impacts of dollarization on bank lending rates. The other areas included in this section are determinants of bank liquidity, determinants of cost of funding, constraints on bank lending rates and the weighted average cost
of capital for banks operating in a dollarized economy. Although, Zimbabwe has adopted a multi currency system this has not resulted in official dollarization (Hawkins, 2010). The different factors at the heart of bank lending rate determination vary over time and as such not constant, implying that bank lending rates will fluctuate in response to changes in these determinants.

2.1.5.1 DETERMINANTS OF BANK LIQUIDITY

The level of liquidity in the economy plays a pivotal role in the bank’s lending activities as one of the force that propel determination of lending rates. Deposits being liabilities to the public are the most secure and liquid source available to a bank to onlend to the borrowing fraternity (Ahmed, 2009). The growth of bank deposits underpins the capacity of banks to provide financing facilities to borrowers. There are no specific determinants of bank deposits growth, but this varies from one country to the other depending on obtaining economic conditions. Growth in deposits reveals the extent of the country’s financial deepening level. Eduardo, Ozsoz, and Rengifo (2012) defined financial deepening as “the availability of funds provided by financial intermediaries to the final users (individuals, governments, and firms)”. Over the years, financial deepening has been a vehicle of economic growth in mostly developing and emerging markets. The factors affecting growth of deposits in Zimbabwe under the multi-currency regime has been different form the period before where there used to be long term deposits which now compares to short term and transitory in nature.

It has been noted that high inflation, weak institutions, and financial instability are contributory factors to the depth of financial systems which becomes shallow (Eduardo, Ozsoz, and Rengifo, 2012). Dollarization brings an alternative currency to a local currency which in most instances was suffering erosion due to inflationary pressures, in doing so complementing or adding to financial deepening of the economy. With full dollarization, printing money becomes an impossible source of liquidity, which then normally forces central banks to hunt for other permitting alternative ways to handle periods of financial distress (Reserve Bank of Atlanta,
Interbank interest rates are positively correlated to liquidity retained by banks (Lucchetta, 2007). Relatively higher interbank rates normally depict shortage of liquidity in the market and vice versa. Dollarization is a key catalyst in improvement of bank liquidity and asset quality, in the same manner economic fundamentals like macroeconomic variables and financial structure indicators significantly determine bank liquidity (Reserve Bank of Atlanta, 2006).

![Figure 2.5: Zimbabwe’s Balance of Payments position, Source: RBZ 2013](image)

Zimbabwe’s bank liquidity has also been negatively affected by the level of the country’s balance of payments (BOP). The overall BOP position has continued to report in the negative territories from its prior multi-currency period a situation which shows that the economy is a net importer, thereby affecting negatively the flows of funds in and outside the local economy. The greatest challenge has been the increasing imports which cover electricity, grain and most food items under the multi-currency regime. Exports income coming mainly from tobacco and minerals has not been enough to meet the ballooning import levels. This has meant that the bank’s liquidity positions continue to worsen.

One of the factors that determine lending rates is the level of financing capacity. Biyam (2012) highlighted that the banking sector’s financing capacity is a function of intertwined factors which are domestic deposits growth, credit lines and exports.
growth. The financing capacity rests largely on the level of money supply in the economy. Money supply encompasses the official funds in both the official and unofficial systems. Money in circulation in the official system occupies a more significant position to bank lending as these funds are available for onlending purposes. The amount of money supply in the economy is a determinant to liquidity levels in the economy. RBZ (2013) points out that liquidity has an important role in the determination of bank lending rates. As further stated by the RBZ, liquidity has a number of sources with the following applying in the case of Zimbabwe: exports, diaspora inflows, foreign direct investment, lines of credit and portfolio inflows.

**2.1.5.2 DETERMINANTS OF COST OF FUNDING**

Bank’s cost of funding is influenced by the repo rate, market forces, and money market conditions thus making it improper to consider the repo rate on its own as a proxy to bank’s average cost of funding (South Africa Reserve Bank, 2010). To arrive at the total cost of funding of a banking institution, the following should be incorporated: deposit rate, cost of foreign funding and cost of capital.

Up to the close of 2008, lending rates in Ireland were dictated largely by changes in the European Central Bank’s policy rates which changed afterwards as a result of increasing bank cost of funding (Goggin et al., 2012). Goggin et al (2012) further points out that prior to the close of the year 2008, bank lending rates were influenced by three determinants which are funding costs, mark up over funding costs and competitive pressure after which the increased credit risk induced costs took over as the driving factor in establishing lending rates. The determination of bank lending rates is driven by the three pillars of cost of funding, the credit risk profile of the client and specific bank risk appetite (Reserve Bank of South Africa, 2010). The foundation to determination of bank lending rates is the cost of funding to which a risk premium is added to compensate for the different risks associated with lending.

Borrower characteristics are one of the key determinants of cost of funds (Angelini, Nobili and Picilio, 2007). The importance of borrower characteristics in the
The determination of cost of funding depends on the conditions applicable in the field of lending. An example to support this view is the period before the 2007 crisis where borrower characteristic was not an important determinant (Angelini, Nobili and Picilio, 2007). Where borrower characteristics are key to ascertain the level of cost of funding this has led banking institutions to charge different rates to different borrowers, depending on credit riskiness. Good or bad classes of borrowers will face different lending rates. Borrower characteristics are important to define a client’s credit risk profile, which is dependent on a number of factors including client creditworthiness, loan tenor, loan type, level of collateral security, concentration risk and the degree of product mix offered to a client (Reserve Bank of South Africa, 2010). Under the multi-currency regime in Zimbabwe, majority of borrowers do not have the necessary collateral security, have poor client creditworthiness and being offered largely short term loans, which factors have meant that the determination of cost of funding in Zimbabwe becomes relatively high.

Dietrich (2009) carried out a study analyzing loan rate differentials between small and large loan sizes basing on data of 15 Swiss commercial banks and found out that the average credit costs are higher for small loans as compared to large loans. He further stated that there exists a negative correlation between bank lending rates and the size of the borrowing amount meaning that small loans are priced relatively higher and are charged higher lending rates. The reasons for such a conclusion are based on higher operational costs [expressed as a percentage of principal figures] associated with small loans.

The determination of lending is a function of a number of variables which includes interest expense on deposits, service costs for operating the deposits accounts, deposit insurance, cash reserve requirements and ideal requirements. These variables when combined help to define cost of funding of a bank. Subrahmanyam (2008) states that “the lending rates that banks charge must be high enough to cover the marginal cost of funds including: (a) deposits servicing costs and the cost
of Cash Reserve Requirements (CRR); (b) cost of servicing loans and the probable
default; and (c) a target return on own funds, that is equity capital of the bank”.

Subrahmanyam (2008) summaries the cost of funds to a bank by describing the
effective cost of funds, effective cost of debt funds and marginal cost of funds based
on the equations below:

\[
\text{Effective cost of funds} = \left[ \frac{(Interest \ paid(\%)+Service \ costs(\%)+Deposit \ insurance(\%))}{(1.0-(CRR+Idle \ Balances \ allocated))} \right] \times \\
\text{Share of funds of each category in the total (DD + SD + TD + BO + PR + OF)}
\]

\[
\text{Effective cost of debt funds} = \text{Effective cost of deposits (DD + SD + TD)} + \\
\text{Cost of (BO + PR + OF)}
\]

The same author also defines marginal cost of funds based on the equation below:

\[
\text{Marginal (total) cost of funds} = \\
\text{Effective cost of debt funds} + \text{Effective cost of (PR + OF)}
\]

The symbols in the above equations stand for the following:

DD = Demand Deposits (Current Account Balances)
SD = Savings Deposits
TD = Time (fixed) Deposits
BO = Borrowings
PR = Provision;
OF = Own Funds
CRR = Cash Reserve Requirements

Determination of bank lending rates is also dependent on the group/type of
borrowers concerned. Certain group of borrowers attract high lending rates as a
result of the quantum of risk associated with their risk profiles. Subrahmanyam, (2008) states that Banks quote many different loan rates for different customers and borrowers are classified broadly into three groups for loan pricing purposes: (i) Prime borrowers; (ii) Perceived-value borrowers; and (iii) Relationship borrowers. Loan pricing is done differently for each category of borrowers.

2.1.5.3 BANKS’ WEIGHTED AVERAGE COST OF CAPITAL

The CAPM model is usually used to depict cost of capital for banks. This model was developed by Markowitz (1952) and Sharpe (1964) outlining the relationship of risk and return. This relationship establishes the risk free rate of return and the premium to arrive at the expected rate of return, which is normally denoted with the equation below:

$$ E(R_i) = R_F + \beta_i (R_M - R_F) $$

The variables are defined as follows:

- $E(R_i)$ = expected return on asset i,
- $R_F$ = risk free rate,
- $\beta_i$ = beta of asset i,
- $R_M$ = expected return on market portfolio.

![Diagram depicting the Capital Asset Pricing Model (CAPM)](image-url)
The risk free rate is considered to be represented by the proxy of the 91-day Treasury bill rate which is obtained from the money market. The principal conclusion from the CAPM model is that relevant risk of an individual asset is measured by its contribution to the risk of a well diversified portfolio (Brigham and Ehrhardt, 2005). The Euro zone crisis of 2010 where securities considered risk free turned out the opposite has compromised the existence of risk-free rates in general globally.

2.1.5.4 DOLLARISATION IMPACTS ON BANK LENDING RATES
Aristei and Gallo (2012) outline that interest rates set by Central Bank affect the interbank rates, which are the basis of the process of defining the cost of money lent by banks to their customers, therefore they have effects on the behaviour of borrowers and consequently on the real economy. On the other hand, prices set by banks influence their profitability and soundness and thus the financial stability. Under dollarization the Central Bank has no power to set interest rates a case existing in Zimbabwe under the multi-currency regime.

The demand and supply forces of funds are influential in the determination of bank lending rates. If there is excess demand for bank funds, banks are likely to raise loan prices (interest rates) to equalize demand with supply and increase their profits. (Gama and Geraldes, 2012). An excess supply of funds would result in the opposite and see softening of lending rates as banks jostle for available customers. The real rate of interest is determined by the demand for borrowing and the supply of lendable funds (Franks, Broyles and Carleton, 1985). As long as there is no equilibrium between demand for funds and supply, interest rates are bound to change. It is further stated by Franks, Broyles and Carleton (1985) that the demand for funds is determined by the marginal productivity of capital such that whenever the rate of return that would be available from additional (equivalent risk-free) projects is greater than the interest rate, demand for funds will tend to increase the interest rate until the real rate of interest equals the (real) marginal productivity of capital.
2.1.6 LENDING RATES THEORIES

This section deals with the theoretical review of the major lending rate theories. Included also under this section, are the weakness and strengths of the lending rate theories. The theories covered under this section include the following prime rate, term structure of interest rates, expectations theory, segmented markets theory, liquidity preference theory, and the behavioural model of money supply determination.

2.1.6.1 PRIME RATE

Prime rates are critical and key in determination of lending rates as they provide a benchmark position. This prime rate is based on a number of factors including macro-economic factors and the bank’s cost of funds. Saunders and Schmeits (2001) define prime rate as the “the lending rate on which banks base the interest rate they charge on loans to borrowers”. Different types of prime rates are applied in practice to determine bank lending rates. It is often common practice that a markup is added to the prime rate to arrive at bank lending rates. Subrahmanyam (2008) noted examples of prime rates to include the Mumbai Inter-Bank Offered Rate (MIBOR), a Treasury Bill rate, a Certificate of Deposit (CD) rate and a call money rate.

Associated with the prime rates are offshore credit lines which could be used to determine bank lending rates by making them to be the floor rate, to which a markup would be added to arrive at the final figure. The determination of this markup will take the perceived political and country risk aspects into consideration. Zimbabwe currently enjoys offshore credit lines mainly from Afreximbank, PTA Bank, African Development Bank and Diaspora Bonds among others. The average interest rate on offshore lines of credit has been around 10%. Closely linked also to the prime rates is the inflation model where bank lending rates are determined by setting a markup over and above inflation rate. The linking of inflation to bank lending rates should be done in a manner that results in positive real rates, as well as taking into account specific risk premium of different borrowers (RBZ, 2011). Determination of bank
lending following the inflation model will require lending rates to reflect inflation, cost of funds, and risk factors among other factors. Reilly and Brown (2003) show that the factors that cause interest rates to rise or fall are described by the following model p. 748:

\[ i = RFR + I + RP \]  \hspace{1cm} 9

The variables in this model are defined as follows

\[ i = \text{interest rate} \]
\[ RFR = \text{real risk - free rate of interest} \]
\[ RP = \text{risk premium} \]
\[ I = \text{the expected rate of inflation} \]

Reilly and Brown 2003 further state the variables mentioned above to be the fundamental determinants of interest rates, which rates are also subject to the forces of demand and supply.

2.1.6.2 YIELD CURVES/TERM STRUCTURE OF INTEREST RATES

Lending rate levels are determined by yield curves (term structure of interest rates). Reilly and Brown (2003) describes yield curves as having different shapes with common types being, the rising yield curve, a declining yield curve, a flat yield curve and a humped yield curve. The three term structure facts are interest rates for different maturities tend to move together over time, yields on short –term bond more volatile than yields on long-term bonds and long-term yield tends to be higher than short term yields meaning that yield curves usually are upward sloping (Mishkin, 2006 and Cecchetti, 2011). The three basic theories of the term structure of interest rates are pure expectations theory, liquidity preference theory, and market segmentation theory.(Schweser, 2007).

The three theories of term structure of interest rates explain the 3 above mentioned facts as follows: the expectations theory explains facts 1 and 2 but fails to explain
fact 3 very well, the segmented theory explains fact 3 but cannot explain facts 1 and 2, the liquidity premium theory which combines both the expectations and the segmented market theory explains all the 3 facts (Mishkin, 2006 and Cecchetti, 2011). The term structure of interest rates, deriving from paradigms of unbiased expectations, liquidity preference, and market segmentation, establishes integration across the maturity spectrum, i.e. short, medium and long ends of the financial market (Misra and Mahakud, 2009). The importance of the term structure of interest rates is their capability to establish a relationship between long and short term rates.

### 2.1.6.2.1 EXPECTATIONS THEORY

The pure expectations theory states that the yield for a particular maturity is an average of the short term rates that are expected in the future (Schweser, 2007). The shape of the yield curve under the expectations theory is largely from the market participants' interest rate expectations (Reilly and Brown, 2003). A key assumption of the expectations theory is that buyers of bonds do not prefer bonds of one maturity over another (Mishkin, 2006 and Cecchetti, 2011). With the expectations theory, long term rates result from the averages of the expected short term rates in the future, to the extent that movements in future short term rates affect long term rates. This phenomenon where interest rates of different maturities will move together supports fact 1 stated above. The average long term rate has a smoothing out effect on large volatilities leading to conclusion of fact 2. A case whereby at a given point in time, short term yields are as likely to be high as they are to be low, means that the expectations theory predicts that yield curves are likely to be upward sloping as they are to be downward sloping (Mishkin, 2006 and Cecchetti, 2011). If this happens then the expectations theory fails to explain why yield curves usually depict an upward sloping nature.

### 2.1.6.2.2 SEGMENTED MARKETS THEORY

Market segmentation theory is based on the idea that investors and borrowers have preferences for different maturity ranges with supply and demand determining equilibrium yields for the various maturity ranges (Schweser, 2007). The
segmented markets theory is also termed the institutional theory, the preferred habitat, or the hedging pressure theory. Its major assertion is that diverse institutional investors do not have similar maturity needs but rather are different which will drive them to confine asset selections to specific maturity segments. This assumption will lead to different maturity markets that can be completely segmented. Reilly and Brown (2003) states that the segmented market theory contends that the business environment along with legal and regulatory limitations, tends to direct each type of financial institution to allocate its resources to particular types of bonds with specific maturity characteristics. With this market segmentation theory the credit market will have different segments with the lending rate for each segment dependent on the supply and demand within that credit market segment. Banks will be inclined towards the shorter maturities while life insurance companies and pension funds would go for long maturities on balances. Bonds of shorter holding periods are associated with lower inflation and interest rate risks, thus the segmented market theory predicts that yield on longer bonds will be expected to be higher explaining why the yield curve is usually upward sloping (Mishkin, 2006 and Cecchetti, 2011).

2.1.6.2.3 LIQUIDITY PREFERENCE/PREMIUM THEORY
Liquidity preference theory states that investors require a risk premium for holding longer term bonds in addition to expectations about future short term rates (Schweser, 2007). This assertion will result in longer term securities realizing higher returns than short term obligations, as lenders tend to prefer short-term loans to long term loans. The reasons for investors to favour short term loans are based on that short term bonds are less volatile, more certain and more liquid as a result of free inflation and interest rate risks. Liquidity preference theory views the yield curve to be upward sloping always, with any variations considered temporary abnormality. This theory produces yield curves that are more steeply upward sloped and will normally slope upwards, only rarely will the yield curves lie flat or slope downwards (Mishkin, 2006 and Cecchetti, 2011).
The diagram above illustrates the liquidity premium and expectations theories as to the nature of the yield curves. With expected short term rates to be the same at 30% for the next 30 years, the predictions of expectations and liquidity preference theories will be a flat and upward sloping yield curves respectively.

2.1.6.3 BEHAVIOURAL MODEL OF MONEY SUPPLY DETERMINATION

The control of the money supply is crucial in determination of bank lending rates. This model deals with money supply determination as the control of stock of money has a big impact on determination of interests. The assumptions to this model are that it is needful for a bank to hold a relatively small proportion of its total assets in the form of non-earning cash known as the reserve assets, non bank public have a desired fixed ratio in which they hold currency and bank deposits (Levacic and Rebmann, 1982). These assumptions will lead to the following equations

\[ M = C + D10 \] (definition of money supply)

\[ r = \frac{R}{D} (0 < r < 1) \] (bank reserve ratio)
The variables in equation 10 to 12 are defined as follows:

\[ \begin{align*}
    & M = \text{money supply} \\
    & C = \text{currency in circulation with non-bank public} \\
    & D = \text{bank deposits} \\
    & R = \text{cash reserves held by banks} \\
    & r = \text{it assumed that all banks in the economy maintain a fixed reserve ratio}
\end{align*} \]

From the three above equations the bank multiplier is derived which is considerably larger than 1.0 since \( r \) and \( c \) are quite small numbers (Levacic and Rebmann, 1982). The equation of the bank multiplier is given below:

\[ M = \left( \frac{1+c}{r+c} \right) (R + C) \quad 13 \]

\[ M = m (R + C) \quad 14 \]

\[ M = mH \quad 15 \]

The above equations illustrates that the money supply in a given economy is the product of the bank multiplier with the monetary base/high powered money (sum of currency held in circulation with the public and bank cash). The Behavioural model considers banks as firms that have inputs and outputs. Different financial products and services represent the output with deposits as the input. A bank’s cost function is shown below as

\[ Z = Z(D) + D^p_iD \quad 16 \]

the variables in the above stated equation are as follows:

\[ Z = \text{bank costs} \]

\[ Z(D) = \text{real resource costs, which depend on the total volume of deposits, and} \quad \frac{dZ}{dD} > 0 \]
\( i_D = \text{rate of interest paid on time deposits} \)

\( D^T = \text{volume of time deposits} \)

\( D = \text{volume of time plus sight deposits} \)

The model assumes that the revenue streams of a bank comprise mainly of bank charges levied on sight deposits and the interest rate obtained on bank loans. The total revenue and bank’s profits are obtained as below:

\[
REV = aD^s + D(1 - r)i_L  \tag{17}
\]

\[
\pi^B = aD^s + D(1 - r)i_L - Z(D) + D^Ti_D  \tag{18}
\]

The additional variables are given as

\( \pi^B = \text{Bank profits} \)

\( D^s = \text{sight deposits} \)

\( a = \text{bank charge per unit of sight deposits} \)

The behavioural model has profit maximizing conditions of the bank as given by the equation

\[
\frac{d\pi^B}{dD} = \left\{ a \frac{dD^s}{dD} + (1 - r)i_L \right\} - \left\{ \frac{dz}{dD} + \frac{dD^T}{dD} \frac{dD}{Di_D} \right\} = 0  \tag{19}
\]

The conclusions of the behavioural model is that there is need to consider the behavioural functions for the bank’s depositors and borrowers, with a constant volume of high-powered money the banking system as a whole can only increase its volume of deposits by putting up the interest rate on time deposits resultantly attracting more cash reserves by persuading the public to hold less currency, the demand for bank loans will increase if the interest rate on bank loans falls or if an increase in expected future income and profits raises the demand for credit (Levacic and Rebmann, 1982).

2.2 EMPIRICAL STUDIES

This section presents the empirical studies relating to the determination of lending rates based on region or country specifics.
2.2.1 MALAYSIA

Malaysia adopted dollarization from 1909 to 1937 for the second time after its first encounter covering the period 1849 to 1888. Ahmad and Karim (2011) notes that Malaysia has undertaken various measures toward liberalizing its financial systems since early 1970s in an endeavour to manage interest rates. The model used to analyse the interest rates was a general model which features both foreign and domestic factors affecting behavior of interest rates, basing on the framework of Edward and Khan (1985), as follows:

\[ i_t = \psi (i_t^* + e^t) + (1 - \psi) (rr_t + \pi^e_t) \]

where,
- \( i_t \) = The nominal rate of interest at time \( t \);
- \( i_t^* \) = The foreign nominal rate of interest at time \( t \);
- \( e^t \) = The expected change in the domestic currency exchange rate for time \( t \);
- \( rr_t \) = The real rate of interest at time \( t \);
- \( \pi^e_t \) = The expected rate of inflation for time \( t \); and
- \( \psi \) = A measure of degree of capital mobility or degree of financial openness

It is further stated by Ahmad and Karim (2011), that prior to the financial crisis in 1997, external variables, namely, foreign interest rates and expected changes in exchange rate had a significant influence on the process of domestic interest rate determination in Malaysia. Ahmad and Karim (2011) noted that post-crisis, the situation changed, and domestic monetary conditions appeared to affect interest rates the most.

2.2.2 ECUADOR

Ecuador is a country with a population of 13 million and is heavily dependent on export of oil, bananas and shrimp (Berrios, 2006). This nation declared the adoption of the United States dollar to become legal tender in January 2000 in the centre of an economic and banking crisis to become a fully dollarized economy (Reserve
Circumstances surrounding Ecuador presented very little options except only to go for the dollarization avenue (Beckerman, 2001). The reason for the few options was largely attributable to the authorities losing ability to control money supply. Through dollarization, Ecuador lost power over policy instruments though in reality they had already lost the power before as manifested in the deteriorating macro economic variables.

Prior to dollarization Ecuador, faced the following situations: open economy route failure, large budget deficits, inadequate taxation, poor bank supervision, rising corruption, political uncertainty, rising external debt and heavy dependence on oil which prices slumped were instrumental in propelling the economy to inflationary pressures, bank liquidity challenges and slow economic growth (Reserve Bank of Atlanta, 2006 and Berrios 2006).

Full dollarization eliminated currency risk, reduced country risk, and made it possible to achieve real GDP growths. Dollarization did help to lower inflation although its effect was gradual and not sudden. Ecuador’s economy was not economically stable prior to dollarization. Dollarization helped to achieve reduced inflation rate, reduced country risk premiums and gains in policy credibility (Reserve Bank of Atlanta, 2006). These results took effect much slower in comparison to El Salvador.

In order to deal with the central bank’s lost functionality of lender of last resort, Ecuador changed the role of the central bank, created a liquidity fund and increased rigorous and advanced modern bank supervision and regulation strategies (Reserve Bank of Atlanta, 2006). The liquidity fund was meant to augment the central bank’s funding capacity to accommodate banking institutions in short positions (Beckerman and Solimano, 2002).

### 2.2.3 PANAMA

Panama’s dollarization worked well both in the short term and long term due to a strong international backing of its banking sector (Beckerman, 2001). Panama is a relatively small country that engaged dollarization since independence around 1903 (Frankel, 2000). It conducts a lot of trade with the United States of America.
Dollarization has resulted in fairly lower inflation rate levels in Panama, even much lower than the United States of America (Frankel, 2000 and Goldfajn and Olivares, 2001). Dollarization did not provide security on fiscal discipline, it was responsible for GDP growth volatility to some extent and reduction of currency risk did not stop the rise of default risk (Goldfajn and Olivares, 2001). Panama was characterized with poor fiscal discipline despite the dollarized environment. The low interest rates experienced in Panama cannot be with certainty attributed to dollarization as the competitive international banking system provides another contributory factor (Goldfajn and Olivares, 2001). This is because Panama was involved in liberalization of the banking sector and allowed interest rates to be market determined in 1970. Bank lending rates in Panama under dollarization followed the prime rate. Banking institutions ended up overcoming the problem of absence of lender of last resort by outsourcing funds through lines of credits.

2.2.4 EL SALVADOR

El Salvador opted for full dollarization in 2001 being propelled by the need to enhance its economic reform process (Reserve Bank of Atlanta, 2006). Before the official dollarization of 2001, El Salvador had earlier tasted dollarization covering the years around 1800-1969. There had been structural reforms that had been implemented to prop up economic stability, whilst at the same time luring foreign direct investment and as such full dollarization was supposed to augment those reforms.

Implementation of structural reforms was carried out beginning of the 1990s. El Salvador adopted a fixed currency in 1993 in order to bring down exchange rate risk. Dollarization failed to have interest rates levels reduced but were maintained at original high levels as a result of lack of confidence in the fixed exchange rate system, which was in place (Reserve Bank of Atlanta, 2006). The government opted for dollarization for the major reasons being to lower interest rate, increase foreign investment and reduce transactions costs in trade. El Salvador was economically stable and experienced low inflation rates before official dollarization. The major
The effect of dollarization was to force inflation rates to decline in an even way. Due to the non-availability of a lender of last resort function in El Salvador, a situation brought about by dollarization, resulted in banking institutions holding a larger proportion of liquid assets on their balance sheets. Dollarization resulted in diminished margins for banking institutions in El Salvador.

2.3 SUMMARY

Dollarization has been used as a solution by a number of countries during their life histories for different causations. Although dollarization has been used as a solution evidence show that it has not been applied on a permanent basis. Determinants of bank lending rates vary with respect to changes in circumstances and economic fundamentals.

This chapter has discussed the key determinants of bank lending rates under multi-currency regime. These variables are as follows: operational costs, inflation, interest expense, deposit insurance costs, cost of capital and credit risk. Under dollarization a country relies more on remittances, foreign investment and health positive balance of payments position for growth in deposits as the central bank has no control over money supply. Bank lending rates are influenced and determined by the market through the forces of supply and demand. There is need to investigate more into the determination of bank lending rates in Zimbabwe under the multi-currency regime in order to establish why the obtaining levels are perceived high.
CHAPTER THREE

RESEARCH METHODOLOGY

3.0 INTRODUCTION
The research methodology outlines chronologically the relevant steps the researcher followed in executing the research project. The appropriateness of research methods is key and critical and as such the researcher will provide brief justification. To be covered under this chapter are the following areas: research design, research philosophy, research strategy, population and sampling techniques, data collection methods, validity and reliability, research procedure and research limitations. Methodology is defined as a system of broad principles or rules from which specific methods or procedures may be derived to interpret or solve different problems within the scope of a particular discipline (www.businessdictionary.com).
3.1 RESEARCH DESIGN

Research design provides the guiding framework of the methods used by the researcher in attempting to answer the research questions and research objectives. It details the whole spectrum of approaches including type of evidence to be collected, where and how to obtain the relevant evidence, data collection techniques and data analysis including the interpretation thereof. The authors given below all agree in their definition of research design, although expressed differently. Burns and Grove (2003) describe a research design as “a blueprint for conducting a study with maximum control over factors that may interfere with the validity of the findings”, Parahoo (1997) expresses a research design as “a plan that describes how, when and where data are to be collected and analysed”, Polit et al (2001) describes a research design as “the researcher’s overall for answering the research question or testing the research hypothesis”, whilst Hussey and Hussey (1997), explains research design as the full package approach to the research process, that covers data collection and analysis.

The advantages of a research design to a research project are manifold and includes those noted by Saunders, Lewis and Thornhill (1997) as vital to arrive at informed decision regarding the research methodology, to ensure that limitations and constraints are dealt with in manner that do not compromise attainment of research objectives and it allows for a cost benefit analysis of research methods to be carried out. Burns and Grove (2003), defines a qualitative approach as “a systematic subjective approach used to describe life experiences and situations to give them meaning”. The researcher chose the mixed approach research design which is a combination of both quantitative and qualitative. Mixed approach research design is more appropriate to address this research study focusing on the determination of optimal bank lending rates in Zimbabwe under the multi-currency as both quantitative and qualitative aspects are essential for answering the research objectives and questions. This research project is premised on the survey research design.
3.2 RESEARCH PHILOSOPHY

This research study is to a large extent based on phenomenological paradigm as excessive lending rates could exist but yet supported fundamentally by underlying factors. This philosophy is more relevant to the study due to the fact that there is no casting stone on determination of optimal bank lending rates since this depends on the level of supporting factors. Phenomenological philosophy concentrates on multi focus state of reality as opposed to one state reality. Determination of optimal bank lending rates relies more on subjective and interpretivist analysis. The research topic understudy is far more complex and is dependent on how the different stakeholders feel about the level of prevailing lending rates.

Table 3.1: The characteristics of the two main research paradigms

<table>
<thead>
<tr>
<th>Positivistic Paradigm</th>
<th>Phenomenological Paradigm</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Quantitative</td>
<td>- Qualitative</td>
</tr>
<tr>
<td>- Objectivist</td>
<td>- Subjectivist</td>
</tr>
<tr>
<td>- Scientific</td>
<td>- Humanistic</td>
</tr>
<tr>
<td>- Traditionalist</td>
<td>- Interpretivist</td>
</tr>
<tr>
<td>- Experimentalist</td>
<td></td>
</tr>
</tbody>
</table>

Source: Hussey and Hussey 1997

The researcher chose the phenomenological approach based on the assumptions that favoured the type of this research study, which assumptions are detailed in the table below and distinguished from the other paradigm:

Table 3.2: Assumptions of the two main Paradigms

<table>
<thead>
<tr>
<th>Assumption</th>
<th>Question</th>
<th>Positivistic</th>
<th>Phenomenological</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ontological</td>
<td>What is the nature of reality is objective and singular, apart</td>
<td>Reality is objective and singular, apart</td>
<td>Reality is subjective and multiple as seen by</td>
</tr>
</tbody>
</table>
### Epistemological

<table>
<thead>
<tr>
<th>Reality?</th>
<th>from the researcher</th>
<th>participants in a study</th>
</tr>
</thead>
<tbody>
<tr>
<td>What is the relationship of the researcher to that being researched?</td>
<td>Researcher is independent from that being researched</td>
<td>Researcher interacts with that being researched</td>
</tr>
</tbody>
</table>

### Rhetorical

<table>
<thead>
<tr>
<th>Language of research?</th>
<th>Formal</th>
<th>Informal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Based on set definitions</td>
<td>Evolving decisions</td>
<td></td>
</tr>
<tr>
<td>Impersonal voice</td>
<td>Personal voice</td>
<td></td>
</tr>
<tr>
<td>Use of accepted quantitative words</td>
<td>Use of accepted qualitative words</td>
<td></td>
</tr>
</tbody>
</table>

### Methodological

<table>
<thead>
<tr>
<th>Process of research?</th>
<th>Deductive process</th>
<th>Inductive process</th>
</tr>
</thead>
<tbody>
<tr>
<td>Static design.</td>
<td>Emerging design</td>
<td></td>
</tr>
<tr>
<td>Categories isolated before study</td>
<td>Categories identified during research process</td>
<td></td>
</tr>
<tr>
<td>Context free</td>
<td>Context bound</td>
<td></td>
</tr>
</tbody>
</table>

Source: Creswell 1994

### 3.3 RESEARCH STRATEGY

The research strategy defines the general plan to be followed by the researcher during the execution of the research. For the purposes of providing answers to the research questions and objectives, the study used the survey research strategy. The researcher chose a subset to be a representative of the large population. This strategy was more appropriate as all the elements of the population could not be accessed given the time and financial constraints. The advantages of this strategy were versatility, efficiency, generalizability, simplicity, accuracy and reliability. The objective of this study is to determine the relationship between optimality and current
bank lending rates thus prompting the researcher to adopt an analytical survey research strategy.

3.4 POPULATION AND SAMPLING TECHNIQUES

Parahoo (1997) describes a population as “the total number of units from which data can be collected”, this includes institutions, human beings and events. The same view is supported by Burns and Grove (2003) who defines a population as the whole group of all elements that deserve and qualify to be included in a research study. It is further stated by Burns and Grove (2003) by defining the eligibility criteria as “a list of characteristics that are required for the membership in the target population”. The population of this research is made up of the following elements: all banking institutions, regulators of the banking institutions and borrowers. This target population represents all the key elements directly active in the credit market.

3.4.1 SAMPLE

Polit et al (2001) describes a sample as “a proportion of a population”. According to Wegner (2003) sampling is defined as “the process of selecting a representative subset of observations from a population to determine the characteristics that is, the population parameters, of the random variable under study”. A sample is a subset of the population and is used to infer characteristics of the population. A study and analysis of a sample provides the researcher with behavior pertaining to the entire population. A sample needs to be representative enough to allow the researcher to draw reasonable conclusions with minimum bias (Leedy and Omron, 2001). This research used a non-probability sampling method to select the sample for the study. Non random or non probability sampling technique which was employed in this research study is where the observations have not been given equal chances. A non probability sampling method was more appropriate to achieve the objectives of this study due to the fact that the respondents were required to have sufficient knowledge about the determination of bank lending rates which could not be achieved if the equal basis probability sampling method was to be used. From the various non probability sampling methods, the purposive sampling technique was
chosen as the most ideal for this research. The major reason for opting for purposive sampling technique was to achieve a sample with respondents that have a good appreciation of the optimal determination of bank lending rates in a multi-currency regime. Elements from the population were selected on the basis of the researcher’s expert judgement.

The sample for the survey research strategy was picked from banking institutions, regulatory institutions and borrowers all based in Harare. Elements of the population outside Harare proved to be inaccessible due to time and financial constraints. Within Harare, the researcher targeted a cluster of elements conceived to have a better appreciation level on the determination of optimal banking rates. Respondents were selected on purposive sampling method by targeting the departments or units with the highest involvement in banking lending activities which were noted to be credit administration, credit analysis, credit assessment, credit monitoring and credit supervision. The researcher focused on the employees and borrowers of banking institutions that comprised CBZ, ZB, Stanbic and NMB. Each banking institution included in the sample was requested to choose a given number of borrowers they see fit as having understanding to the research topic. These institutions were selected due to their proximity to the researcher and the need to strike a balance of commercial banking, building society and merchant banking with a flavor of an international bank.

### 3.4.2 SAMPLING SIZE

Halloway and Wheeler (2002) holds the view that the size of a sample has no bearing on the importance or quality of a research study and that when using a qualitative approach, there are no specified rules of establishing the size of the sample. The researcher used a sample size of 80 with the following distribution:

<table>
<thead>
<tr>
<th>Group</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reserve Bank of Zimbabwe employees</td>
<td>10</td>
</tr>
</tbody>
</table>
3.4.3 SAMPLING PROCESS

Burns and Grove (2003) consider sampling as a process that involves selection of a group of elements forming part of a research study. The sampling approach employed in this research was non-probability purposive sampling. Non-probability sampling involves a situation where observations and elements are picked without following the random manner (Wegner, 2003). Research studies that use non-probability sampling techniques, entails the researchers to exercise personal judgment in selection of elements to be incorporated in the research study basing on knowledge and understanding of the observable fact under scrutiny (Parahoo, 1997). Parahoo (1997) further describes purposive sampling as “a method of sampling where the researcher deliberately chooses who to include in the study based on their ability to provide necessary data”. Given the time, money and accessibility limitations, the purposive approach was chosen as more ideal.

3.5 DATA COLLECTION METHODS

There are generally two types of classifications in terms of sources of data namely primary and secondary data sources, with the former denoting first time data collection and the latter representing data sourced from existing records and publications (Panneerselvam, 2005). First time data collection done throughout a research study for the purpose of achieving research objectives is termed primary data. Secondary data collection method is where already existing body of information is relied on and consideration is done to the effect of furthering the current research study. The researcher used a combination of the two sources in this research study. Various methods can be used for primary data collection, with the list including among others mail survey, observation, telephone interview and personal interview. Parahoo (1997), defines a research instrument as “a tool used to collect data”. This
research study employed the following techniques in gathering the relevant information:

a. Questionnaires
b. Interviews

**Questionnaires**

Saunders, Lewis and Thornhill (2007) define a questionnaire as a “list of carefully structured questions chosen after considerable testing, with a view to elicit reliable responses from a chosen sample”. The researcher used questionnaires as the main data collection instrument whereby each and every respondent was faced with similar bunch of questions making it possible to analyse and do comparisons of responses. Questions contained in the questionnaires varied from open ended to close ended. The researcher self administered most of the questionnaires and left them with respondents to time for completion, to which end, the collection followed later again by self administration. Saunders, Lewis and Thornhill (2007) lists the advantages of questionnaires as follows: allow respondents time to consider their responses carefully with minimal interference from anyone including the interviewer, cost effective through the provision of questionnaires to many numbers of people at any given point in time, permits uniformity, likelihood of high response rate, can deal with a variety of issues and questions in considerably efficient manner, allows for mailing to respondents and they permit for anonymity.

The disadvantages of questionnaires as outlined by Saunders, Lewis and Thornhill (2007) are as follows: sometimes good response rate may be unachievable, have a complex nature, which compounded with bad designing will lead respondents to stray, considered to be inappropriate method of evaluation, quality of data may be comprised in comparison to the other data collection methods and there is possibility of misuse. The majority of the respondents were in the working class, so the application of questionnaires allowed respondents to complete them during spare times. A number of draft questionnaires were designed by the researcher and were subjected to modifications and fine tuning phase to obtain the final draft. In order to
ensure that errors and weaknesses on the final draft questionnaire are flashed out before engaging the main study, the researcher conducted a pre-testing of the final draft questionnaire. Necessary revisions and corrections emanating from the pilot study were effected on the final draft to obtain a corrected version of the final draft.

**Interviews**

Kahn and Cannell (1957), as quoted by Saunders, Lewis and Thornhill (2007), defines an interview as a focused discussion bordering around two or more individuals. It is further stated by Kahn and Cannell (1957), as quoted by Saunders, Lewis and Thornhill (2007) that research studies utilize interviews for the sole purpose of gathering data that is enshrined with both the characteristics of reliability and validity.

Interviews are split into three categories which are structured, semi-structured and unstructured (also known as in-depth interviews). Structured interviews are premised on standardization of questions which are constructed beforehand (Saunders, Lewis and Thornhill, 2007). Semi-structured interviews also known as in-depth interviews resemble a non-standardized format whilst unstructured interviews provides adequate space for the interviewee to respond without any boundaries regarding issues relating to the area under study (Easterby-Smith, Thorpe and Jackson, 2008). Face to face interviews are known to result in high return rate. Some of the advantages of an interview are that it provides facial expressions, permits probing, there is instant feedback and it allows for clarity. The researcher carried out interviews to various respondents mainly those that had been issued with questionnaires.

3.6 DATA PROCESSING AND ANALYSIS

Collected questionnaires provided the basis for data processing and analysis. Data collected was processed and analyzed using the Statistical Package for the Social Sciences (SPSS) software version 18. The main stages in the processing of collected data using the SPSS involved the creation of a template which required
usage of codes and the input of data into the system. Apart from the SPSS, microsoftexcel spread sheets provided another tool used for data processing and analysis. The analysis of the data followed the PAID (present, analyze, interpret, and discuss) approach. Presentation of research results was done using the following:

a. Bar graphs
b. Pie Charts
c. Line graphs
d. Tables

3.7 VALIDITY AND RELIABILITY

Attainment of research credibility will lead to integrity of research findings, thus validity and reliability becomes assured. To ensure validity and reliability of research results were achieved, the researcher ensured that a representative sample was used and data gathering process was conducted professionally to obtain high quality information. The researcher focused on knowledgeable respondents, structured specific questions, used simple language, ensured proper recording of answers from interviews and vague and ambiguous words were avoided. The researcher believes the reliability of this research study is capable of producing similar conclusions from different researchers on different time periods, whilst findings are valid enough to the extent of matching what they ought to appear. For compliance with research credibility the following questions presented in the table below were observed.

Table 3.4: Questions of research credibility

<table>
<thead>
<tr>
<th></th>
<th>Positivist viewpoint</th>
<th>Phenomenological viewpoint</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Validity</strong></td>
<td>Does an Instrument measure what it is supposed to measure?</td>
<td>Has the researcher gained full access to the knowledge and meanings of participants?</td>
</tr>
<tr>
<td><strong>Reliability</strong></td>
<td>Will the measure yield the same result on different occasions?</td>
<td>Will similar observations be made by different researchers on different occasions?</td>
</tr>
<tr>
<td><strong>Generalizability</strong></td>
<td>What is the probability that patterns observed</td>
<td>How likely is it that ideas and theories generated in one</td>
</tr>
<tr>
<td>in the sample will also be present in the wider population?</td>
<td>setting will also apply in other settings?</td>
<td></td>
</tr>
</tbody>
</table>

Source: Easterby-Smith, Thrope & Lowe 1991

### 3.8 ETHICAL ISSUES

A number of ethical issues were considered during the research study, with high priority given to the need for informed consent from respondents through explanations of the aim of the research, the right to privacy and anonymity, the right to confidentiality, information and data gathered will be kept confidential and will be used only for the purposes of the research, avoidance of invasion of respondents privacy and deception to respondents and obtaining prior consent from respondents.

### 3.9 RESEARCH LIMITATIONS

The study was exposed to the following limitations:

i. Time constraints as the researcher is a full time employee and was required to meet the demands of work commitments at the same time.

ii. Financial resources constraints were experienced on the need to cover the research costs given the view that the researcher relied on personal incomes to finance the research.

iii. Confidentiality of information challenges were met as bank institutions’ employees resisted divulging information relating to their bank lending rates in fear of giving away to competition.

In order to mitigate the impact of the research constraints, the researcher applied the following:

The researcher worked extra hours after normal business hours during working days and sundays which are generally non working days. The researcher borrowed a personal loan facility from a bank to meet the demands of financial resources and also ensured that the respondents remained anonymous and collected questionnaires were kept in a locked office.
3.10 CHAPTER SUMMARY
This chapter outlined the requisite steps and guidelines employed during the research to form the research methodology. The mixed approach research design was considered to be more relevant, whilst the survey was used as the appropriate strategy. For the purposes of data collection the questionnaire and interview were selected as the main instruments. Ethical considerations were taken to be very critical in ensuring data integrity and confidentiality. The chapter also gave justification for selecting the approaches in methodologies used in this research study.

CHAPTER FOUR
RESULTS AND DISCUSSION

4.0 INTRODUCTION
This chapter presents the results or findings obtained from the survey research strategy. The previous chapters discussed the purpose of this study as the determination of optimal nominal bank lending rates in Zimbabwe under the multi-currency era. The results are analysed, interpreted, discussed and summarized in reference to the research questions mentioned in chapter 1. Different graphical methods were applied in presenting the findings of the research study. Interpretation of results was provided on the concept by concept basis. This chapter is organized into various sections as follows; response rate, analysis, results and discussion, testing of research proposition and summary.
4.1 RESPONSE RATE

The researcher distributed 80 questionnaires to respondents from the selected sample obtained from using the purposive sampling technique. Respondents were drawn from the major classes of Reserve Bank of Zimbabwe employees, Ministry of Finance employees, Banking Sector employees and borrowers from the banking institutions. From the targeted respondents of a sample size of 80, sixty six (66) questionnaires were collected, resulting in a response rate of 82.5%. According to Punch (2005) the response rate should be at least 30% to enable the data collected to be deemed ‘usable’ to ensure validity and reliability are maintained. This research study therefore surpassed this level by a comfortable margin.

![Figure 4.1: Response rate by Group of Respondent](image-url)
4.2 ANALYSIS, RESULTS AND DISCUSSION

The analysis, results and discussion of the findings from the survey research strategy is thus presented below:

Class of borrowers.

The banking institutions selected for the research were given the discretion to choose knowledgeable clients on the area under study. Results obtained from the collected questionnaires revealed that all the respondents had borrowed from banks at some time under the different classes shown in the figure below. The research gave evidence that in absolute terms individuals as a class of borrowers have dominated accessing loans under the multi-currency regime represented by 78.3% of the sample. This is supported by the fact that individual accounts are much higher as compared to corporate accounts. One of the factors that led to this outcome is that individuals experienced a higher response rate when compared to corporates where time and need to follow the necessary protocols were a great hindrance. This scenario may be different if value of loan amounts is taken into consideration. In terms of contribution by value to the total loans and advances in the economy, RBZ (2013) states the value of individual loans accounts for only 16% of the total loan book of the economy.

![Figure 4.2: Class of borrowers](image)

Average duration of loans

Findings from the research indicated that about 70.2% of the respondents managed to access loans with an average maturity period of less than 2 years. Such a finding
points out that the bulk of loan facilities offered by banking institutions under the multi-currency regime in Zimbabwe have been significantly short term. This phenomenon is largely attributed to the nature of deposits in the economy which exhibit demand, short term and transitory characteristics. The loan facilities with a tenor of 2 years and above were only accessed by 29.8% of respondents. The majority of the loans with maturity period of 2 years and above represent mortgage finance products. Mortgage finance products have an average tenor ranging from 2 years to 10 years in the dollarized environment, which level is miles below the maximum 35 years maturity period that existed under the normal pre dollarization period. Short term loans pose a big challenge to businesses that require capital expenditure financing as the loan matures much earlier before the returns from the investments are realized. Technically short term facilities have lower level of risk as compared to medium to long term, and resultantly should be priced much lower.

![Figure 4.3: Average duration of loans](image)

This study demanded a high level of understanding of technical issues surrounding credit market and financial intermediation. The level of education was critical for elucidating the key pillars of this research topic. Results from the survey revealed that the majority of the respondents representing 77.8% had at least a degree as the highest level of education. This representation indicated by the respondents
confirmed that the elements/members included in the sample had knowledge capacity required to understand the area of the research title. Holding other things constant, the better the level of knowledge possessed by respondents, the greater the likelihood of a better appreciation of the topic under this research study. Level of education is instrumental in determining the quality of results and findings of this research study. The high level of education of respondents achieved in the research is also the function of the high literacy rate Zimbabwe enjoys.

Figure 4.4: Highest level of qualification

**Perception on bank lending rates in multi-currency era**

The research findings noted an overwhelming agreement that bank lending rates in multi-currency era are excessive. An analysis of the research results showed that only a few proportion of respondents represented by 19.9% either did not know or disagreed that bank lending rates are exorbitant under the multi-currency regime in Zimbabwe. More than 80% of the respondents shared the view that bank lending rates are excessive, with those strongly agreeing making up 38.5% of the received questionnaires. Although a number of currencies are legal tender in the multi-currency era, it is the USD that is predominantly used. The USD is the base currency commonly adopted for reporting financial statements after dollarization in
Zimbabwe. A comparison of Zimbabwe’s average bank lending rates to United States of America’s figures showed huge variances, with the former on the high side. Most loan facilities in Zimbabwe attract an interest rate that is between 10% and 30% which is well above the average of 3% obtaining in America. Without discounting for differences in fundamentals and economic conditions, bank lending rates in multi-currency era are excessive.

Figure 4.5: Overall weighted average bank lending rates are exorbitant

**Corporate weighted average bank lending rates**

The largest beneficiary by value of the total credit/loans extended from banking institutions in Zimbabwe after dollarization has been the corporates class according to statistics from the central bank (RBZ, 2013). The composition of credit to the private sector is thus presented in the figure below:
Total number of respondents representing corporates class was 10 or 15% with the majority being individuals. Although the sample’s three classes which comprised of employees from RBZ, Ministry of Finance and banking institutions are individuals, the researcher viewed these classes as having more than enough capacity to give opinions on corporates lending rates due to the fact that they possess classified information or data or statistics that they keep for their different purposes. The majority of the respondents representing 81.5% viewed average corporate bank lending rates to be exorbitant. Excessive corporate lending rates obtaining in the multi-currency has resulted in high cost of capital to businesses. This has negatively affected chances of securing adequate financing or additional financing as companies are faced with the struggle to service the loans. As a result of the lack of working capital financing largely due to the excessive lending rates corporates capacity utilization failed to improve significantly beyond the 50% mark. When companies fail to service loans, credit risk for banks increases which will end up negatively impacting on the banks performance as more provisions and write offs need to be accounted.
Level of weighted average lending

The level of weighted average lending rates is critical for determining whether they are excessive or not. Lending rates obtaining in the dollarized Zimbabwe economy are known with the weighted average lending rates ranging from 6% to 35% (RBZ, 2013). In order to confirm the RBZ position, respondents were presented with a question on the interest ranges they perceive to incorporate the weighted average lending rate in the multi-currency period. According to the research findings, the 15% to 19% range received the majority support representing 64.1% of the sample. A simple average of this range gives a weighted average lending rate of about 17%. The researcher is agreeable to the research finding of the weighted average lending rate of about 17%, given two major reasons that the average of cost of funding is around 6% and the maximum margin is 12.5% as contained in the Memorandum of Understanding between RBZ and banking institutions. The determination of bank lending rates is a serious matter in post dollarized Zimbabwe requiring urgent attention in the light that the banking lending rates are excessive as confirmed by this research. If no immediate solutions are obtained, the banking sector will remain
exposed to huge non-performing loan books which will likely result in an unsafe and unsound banking sector that will compromise on economic growth.

Figure 4.7: Weighted average lending rate is about 17%
Out of the 66 respondents only 14.1% or 10 respondents either strongly disagreed or disagreed that weighted average lending rates average are about 17% under the multi-currency regime in Zimbabwe. From the 10 that either strongly disagreed or disagreed, the findings showed that about 7 or 71.3% respondents concurred that the majority of lending rates were quoted in the range 10% to 14%. This range will result in a weighted average lending rate of 12% which again is excessive. In summary about 75% of the respondents noted that indeed bank lending rates in the multi-currency era are exorbitant.
Figure 4.8: Weighted average bank lending rate for respondents disagreeing with the 17% average rate

**Basis of determination of bank lending rates under the multi-currency period in Zimbabwe.**

The research investigated the basis of determination of bank lending rates by the banking sector under the multi-currency in Zimbabwe. Every form of pricing in a market that is not monopoly is done in reference to competition; hence any chosen basis of determination of bank lending rates is generally supported by benchmarking. Benchmarking involves an assessment of competitor pricing then factoring the results into the model in use to evaluate the objectiveness of the bank lending rates. In approaching the basis this research objective, the first step was to establish whether there is a basis or no basis in the determination of bank lending rates post dollarization. The research findings obtained from the survey research showed that 88.0% either strongly disagreed or disagreed that there is no basis for the determination of bank lending rates. This view obtained by the research findings is supported by the profit maximization objective of a business. In order to achieve profit an organization ought to achieve revenue that surpasses operating expenses. A situation where there is no basis for the determination of bank lending rates would not likely lead to profit maximization. Picking figures from nowhere or thin air to
represent bank lending rates is not only a recipe for pressures due to overpricing which will result in borrowers substituting for lower priced loans but may lead to closure or liquidation. A banking institution’s viability and business going concern rests on meeting objectives which is only possible if fair pricing of loans according to defined basis of determination is in place.

Figure 4.9: There is no basis for the determination of bank lending rates

Following the Memorandum of Understanding entered into at the beginning of 2013 by the RBZ and the banking institutions agreed to charge lending rates based on cost of funding plus a margin of up to 12.5%. The dominant basis of determination of bank lending rates under the multi-currency is the cost plus method, which case was the same before the inauguration of the MOU according to the findings of this research study. The research findings showed that more than 86% of the respondents’ view was that the determination of bank lending rates post dollarization is based on a cost plus method. Costing structures differ from bank to bank resulting in differences in cost bases largely due to the different sources of deposits and other operational costs. Banking institutions with lower cost structures are likely to quote lower banking lending rates becoming a form of competitive advantage, whilst at the same time giving relief to the overburden borrowers. Cost plus method as a basis of
determination bank lending rates has been the preferred one in the post dollarization era in Zimbabwe due to its major advantage of being not complicated to implement.

The research findings indicated that the respondents held a mixed view on money market forces as the basis of determination of bank lending rates under multi-currency Zimbabwe. This outcome is supported to a large extent by the weak and less active interbank and money market. The money market sets the rates that are used as the floor rates in determining lending rates. Determination of bank lending rates is not entirely based on market forces. It is revealed by the research study that 44% of respondents either strongly agree or agree, whilst 22.7% registered neutrality. The money market plays a critical role in the determination of lending rates but under the multi-currency regime in Zimbabwe, this has not been supported by the outcome of the research an indication of the absence of this role.

Figure 4.10: Determination of bank lending rates is based on cost plus method
Causes of excessive lending rates under the multi-currency in Zimbabwe

This research study sought to investigate the possible causes of excessive lending rates in Zimbabwe under the multi-currency regime. Credit risk is the risk of potential loss stemming from borrowers’ and or counterparties’ failure to meet their repayments. The higher the perceived credit risk, the higher the bank lending rates that will be demanded by the banking institutions as a need to get compensation from the additional risk. The research findings reflected that 59.1% of the respondents either agree or strongly agree that high credit risk is one of the causes of excessive lending rates in Zimbabwe’s multi-currency era. The causes of high credit risk on businesses can be chiefly linked to the effects of hyperinflation period experienced before dollarization. A number of organizations found themselves with weaker balance sheets, sluggish production levels, viability compromises and unfavourable operating business environment. These factors among others contributed to the rise in the credit risk figures of organizations.
Zimbabwe’s overall balance of payments position has been reported in the negative territory for the greater part of the multi-currency period. A balance of payments deficit negatively impacts liquidity conditions of an economy due to the fact that it represents net outflows of funds out of the country. Results obtained from the research study revealed that only 15.1% of the respondents either strongly disagreed or disagreed that BOP challenges is one of the factors leading to high lending rates under the multi-currency period. With a multi-currency system in operation, a net outflow of funds outside the country only worsens the liquidity position of the economy. In the face of negative overall balance of payments position, banking institutions are left to carry lending activities with the funds remaining in the economy or else they will have to rely on offshore lines of credits.
Figure 4.13: Huge balance of payments deficits are causing high lending rates

Political risk is the risk that falls to investments due to political changes or instability in a country. Where there is perceived high political risk, providers of funds will factor that in by demanding higher rates of returns/interest rates. This in turn will force banking institutions to charge excessive lending rates especially in situations where these banking institutions would be relying on external funding/lines of credit. Political or sovereign risk is relatively high under the multi-currency regime in Zimbabwe, leading to high bank lending rates, a position reflected by the research findings where 78.9% of the respondents either agreed or strongly agreed that indeed it is one of the factors causing excessive lending rates. The effects of political risk are manifested in the high average level of rates charged to access lines of credit which have averaged at least 10% post dollarization.
International and standard banking practice requires that long term loan facilities be funded by long term deposits. This matching situation is important to avoid existence of repricing gaps, since repricing gaps normally force banking institutions to resort to rushed and urgent efforts of deposit mobilization which ends up costly and expensive. A bank institution with a short position is more likely to pick deposits at higher rates to avert the negative liquidity position. This research study showed that 75.7% of the respondents either strongly agree or agree that the nature of deposits is short term and as a result causing excessive bank lending rates post dollarization. Banking institutions that rely on short term natured deposits for onlending to long term natured loans, faces pressure to charge increased lending rates to compensate for the mismatch in maturities.
The stock market usually provides the primary source to raise long term funding for organizations through initial public offers and rights issues. Zimbabwe’s multi-currency regime exhibits a situation where banks are acting as the primary source of funding instead of the stock market. The stock market’s failure to provide the platform to raise long term funding has been largely affected by liquidity constraints prevailing in the economy as well as the perceived country risk as foreign investors shun the bourse. A total representing 54.7% of the respondents either strongly agree or agree that banks are being forced to provide long term funding. This scenario has increased pressure on the banking institutions’ need to secure adequate funding. As a result banks are faced with increased demand for loans presenting opportunities to maximize profitability by quoting higher interest rates.

![Figure 4.16: Banks are being forced to provide long term funding](image)

The previous paragraphs outlined some of the factors causing excessive lending rates under the multi-currency regime in Zimbabwe without referring to any order of significance in terms of influence. Respondents were asked through questionnaires to identify the factor they feel has the most significant influence contributing immensely to the excessive lending rates either from factors mentioned earlier or any other. Research findings showed that the major factors contributing to high
lending rates are cost of funds at 20.7%, lack of lender of last resort at 17.2%, limited access to lines of credit at 17.2%, lack of adequate foreign direct investments at 17.2% and high operating costs at 10.3%. The researcher agrees to the findings on the causes of excessive lending rates although disagrees on the position of high operating costs coming fifth. According to the researcher’s view high operating costs should come in second position after cost of funding.

Figure 4.17: Most significant factors influencing bank lending rates

The extent of control in the determination of optimal bank lending rates is critical if fairly priced loans are to be achieved. Three options were considered showing extent of control were considered and the findings were analyzed in the paragraphs below. The majority of respondents representing 72.9% indicated that determination of bank lending rates under the multi-currency should not be controlled 100% by RBZ. For, RBZ to be successful in 100% control over bank lending rates option, this demands that the central bank appreciate in full detail about all banking institutions structures of operating expenses, cost of funding, risk premiums and other determinants of bank lending rates. The practicality of RBZ’s 100% control over determination of banking lending rate is weak due to difficulties on implementations.
given the light that the various rates are required to be used to customers with different risk profiles.

![Pie chart showing distribution of responses]

Figure 4.18: Determination of bank lending rates should be controlled 100% by RBZ

The famous Adam Smith (1776) coined the term “the invisible hand” referring to the force of free markets as the best guide to efficiently allocate scarce resources in an economy. In this case the credit market when left alone under the forces of demand and supply will establish equilibrium bank lending rates. A figure that is less than half of total respondents represented by 43.9% either strongly agree or agree to the view that determination of bank lending rates should be left to market forces 100%. This result showed that the majority of the respondents did not support the determination of banking lending rates to be left to market forces 100%. There was enough evidence from the research to suggest that respondents had confidence in the market forces to play a pivotal role in bank lending rates determination, but there is need to have support and intervention from RBZ.
A middle of the road approach that involves a combination of market forces and intervention by the RBZ in the determination of bank lending rates was the third option considered in the research. This option was overwhelmingly supported by 87.8% of the respondents making it the preferred one. From the research findings, the best approach would be to have market forces determine bank lending rates under the multi-currency regime whilst the RBZ monitors and intervenes whenever necessary. This position is supported by international best banking practices where central banks through open market operations intervene in the credit markets to influence level of interest rates in situations deemed appropriate.
The research revealed that cost of funding is the major driver of excessive lending rates in Zimbabwe under multi-currency. Further, the research sought to investigate the determinants of cost of funding. Interest income is the largest income source for banks and is derived from lending activities. Apart from costs associated with sourcing funds/deposits that will be given to borrowers, banks incur various operating expenses like electricity, water, rentals among others. The costs associated with sourcing funds together with operating expenses are normally factored into the pricing of loans to achieve profitability. Costs associated with sourcing funds includes information technology related costs in maintaining the accounts over a banking system, staff costs for those handling the deposits, transport costs relating to sourcing of the funds and advertising to obtain the sources of funds. The research findings showed that 60.3% ranked operating costs being between most appropriate and third appropriate determinant of cost of funds. Zimbabwe’s operating costs level have been relatively high and this has forced banking institutions to up loan prices in order to break even and remain profitable.
Nominal bank lending rates take into consideration the impact of future inflation. The respondents in this study ranked inflation as the least important of the listed determinants of cost of funding according to this research. Only 33.3% of the respondents ranked inflation between most appropriate and third appropriate determinant of cost of funding. This was largely due to CPI which is used to measure annual inflation which has to a large extent exhibited stability and shown minor changes. Average annual inflation rate has remained in the single digit zone under the multi-currency with figures getting to as low as 2%. Future inflation is expected to be maintained within the same zone due to the continued usage of the multi-currency. The impact of inflation on the determination of nominal bank lending rates is thus minimal in Zimbabwe under dollarization.
Interest expense represents the amounts of money paid by a bank on depositors’ funds in the form of deposits rate. Depositors’ funds vary in their nature, with the most common two categories being identified as retail and wholesale deposits. Wholesale deposits are of a fixed nature and are usually expensive and negotiated with sources of funds, whilst retail deposits are normally obtainable at much lower prices and non-negotiated on deposits rate. Under the international banking best practice, the largest contributor to deposit base of a bank is retail deposits. The multi-currency regime in Zimbabwe is characterized by retail deposits that are short term and transitory in nature as most individuals withdraws all available amounts immediately after salary deposits, whilst businesses are faced with growing pressure from working capital requirements resulting low balances maintained in bank accounts. The majority of respondents represented by 54.0% of this research indicated that interest expense is a significant determinant of cost of funding by registering that interest expense is ranked between the most appropriate and third most appropriate determinant of cost of funding. The mix between wholesale and retail deposits has an influence over the level of cost of funding. Wholesale deposits which are more expensive represent the greater proportion of the deposit mix of
banking institutions in the dollarized period, thereby resulting in high cost of funding. This position contributed to the existence of excessive lending rates post dollarization in Zimbabwe.

Figure 4.23: Interest expense as a determinant of cost of funding

Credit risk is the risk that a counter party will fail to honour and meet its obligations to a banking institution as both or either principal and interest repayments fall due. This research study revealed that credit risk is among the top four most significant determinants of cost of funding. Clients or borrowers with higher credit risk are quoted higher nominal bank lending rates. A figure represented by 61.9% of the respondents concurred to the view that credit risk is ranked between third appropriate and most appropriate determinant of cost of funding. The impact of credit risk as a determinant of cost of funding is not significant post dollarization due to a number of mitigating strategies employed by banks which include screening out high credit risk borrowers, demanding adequate collateral security and seeking insurance covers against defaulting.
Cost of capital relates to the expenses incurred by an organization in the process of raising capital. For banks, capital is required to fund operations, to act as buffer for any losses and to satisfy required minimum capital requirements set by RBZ. After incurring costs associated with raising capital an organization will shareholders as investors through declared dividends and capital gains. Capital is important in providing a fallback position through ensuring the safety of depositors’ funds and providing liquidity which is critical to funding lending activities to borrowers. Findings from this research showed that cost of capital is a strong determinant of cost of funding under the multi-currency regime in Zimbabwe with 41.3% of the respondents supporting it as the most appropriate determinant of cost of funding. Cost of capital in post dollarization Zimbabwe era is relatively high owing largely to liquidity constraints, lack of foreign direct investments and perceived non conducive business operating environment. The higher the cost of capital the higher the nominal bank lending rates quoted by banks.
Deposit insurance costs represent insurance expenses paid to the deposit protection board (DPB) as quarterly premiums of 0.3% per annum of average deposit levels. This cost is mandatory to every bank in Zimbabwe and is meant to ensure protection of depositors against losing their funds or earnings. In the event of a bank liquidation or bank closure which normally results in failure to meet liabilities to the public, the DPB pays the depositors amounts due. This line item is considered as a cost of sourcing deposits and forms part of the cost of funding. The research revealed that 36.5% of the respondents see deposit insurance as ranked between most appropriate and third appropriate determinant of cost of funding. This indicates that deposit insurance cost has an insignificant weight as a determinant of cost of funding in post dollarization Zimbabwe. The major reason attributable to this situation lies on the fact that the deposit insurance cost represents a relatively small amount due to a $30 000 per quarter set limit or maximum cost which has been effective since dollarization until beginning of 2013. However going forward the limit on the deposit insurance cost has been relaxed and this may result in relatively higher costs of funding thus making this line item a more significant determinant of cost of funding.
Models to be used in the determination of bank lending rates

In order to fulfill the research’s objectives, focus was also given to investigate on the models that can be used in the determination of bank lending rates under the multi-currency regime in Zimbabwe. The research considered four models which are money market rate plus margin, bank’s average cost of funding plus margin, offshore lines of credit average cost plus margin and inflation plus mark up that can be used in the determination of nominal bank lending rates under the multi-currency regime in Zimbabwe. Questionnaires to respondents were designed to provide ranking of these models from the most appropriate to the least appropriate. The money market rate plus margin model operates effectively in the presence of a well-established and active money market that sets the floor rate which is adopted by banks to establish the nominal bank lending rates after adding a given margin. The majority of the respondents represented by 35.4% ranked the money market rate plus margin model as the most appropriate under dollarization in Zimbabwe holding other things constant. The support of this model is largely based on its characteristic...
of being heavily reliant on the forces of demand and supply in determining the prevailing rate. In the absence of externalities the free market forces have the capacity to efficiently establish optimal nominal bank lending rates. Although the money market generally gives the indicative short term rates, these short term rates can be used to forecast medium to long term rates with the assistance of the added margin over and above the floor rate.

Figure 4.27: Money market rate plus margin

The inflation model relies on the level of annual inflation rate as determined by the CPI. The floor rate in this case becomes the annual inflation rate to which a markup is added to arrive at nominal bank lending rates. This model works well in a hyperinflationary environment where the prices are continuously changing and updating in response to the galloping inflation rate. The inflation model was ranked last in terms of being ideal according to this research after only 9.4% of the respondents supported it as the most appropriate model to determine optimal nominal bank lending rates in the multi-currency regime in Zimbabwe. The multi-currency regime has witnessed stable inflation rates that are within the single digit zone. Given a stable economic environment general price levels are to a large
extent dictated by fundamentals instead of the “beat inflation” approach which is normal in hyperinflation economies.

Offshore lines of credit plus margin is a model that depends upon on the availability of offshore lines of credit facilities where upon the rates obtaining on these facilities form the floor rate to which a margin is added to arrive at nominal bank lending rates. This model is most effective in a banking environment where the bulk of total deposits are contributed by offshore deposits. From the research findings, it is revealed that only 18.8% of the respondents concur that offshore lines of credit plus margin is the most appropriate model to determine the optimal bank lending rates under the multi-currency regime in Zimbabwe. Offshore lines of credit plus margin model according to the research occupy third position out of the four models. The multi-currency regime in Zimbabwe has witnessed a small number of banking institutions successfully securing lines of credits owing to the high perceived country risk. Average interest rates of these facilities have been around 10%. Due to the limited number of lines of credit that has been successful concluded, this model will fall short to be the most appropriate one in post dollarization era.
Figure 4.29: Offshore lines of credit average cost plus margin

Bank average cost of funding plus margin is a model that considers the costs associated with sourcing deposits which is then expressed as a percentage of total deposits to represent the lending floor rate. The resultant floor rate will have a margin added to it to come up with nominal bank lending rates. This model was viewed as the second most ideal model to be used in the determination of bank lending rates under multi-currency in Zimbabwe. A total represented by 31.7% of the respondents ranked it as the most appropriate model in the determination of bank lending rates in Zimbabwe post dollarization. The effective usage of this model depends on establishing an all-encompassing standard definition of associated costs of sourcing deposits to be used in the model. RBZ (2013) defined associated costs of sourcing deposits as the weighted average of interest paid on the different deposits held by a bank. This definition leaves out administrative costs and information technology related costs which are directly linked costs to deposits. Banking institutions will have different associated costs of sourcing deposits depending on cost structures. Despite the all-encompassing standard definition issue, this model remains relatively easy to calculate and understand.
Profit analysis of selected Bank in Zimbabwe

<table>
<thead>
<tr>
<th>Year</th>
<th>CBZ</th>
<th>ZB</th>
<th>Stanbic</th>
<th>Banc ABC</th>
<th>Barclays</th>
<th>Stan Chart</th>
<th>Market</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>3.8%</td>
<td>2.4%</td>
<td>6.5%</td>
<td>2.9%</td>
<td>1.1%</td>
<td>6.0%</td>
<td>3.1%</td>
</tr>
<tr>
<td>2011</td>
<td>3.4%</td>
<td>3.5%</td>
<td>4.7%</td>
<td>2.5%</td>
<td>0.8%</td>
<td>9.0%</td>
<td>3.4%</td>
</tr>
<tr>
<td>2010</td>
<td>3.4%</td>
<td>1.0%</td>
<td>2.3%</td>
<td>1.3%</td>
<td>-0.6%</td>
<td>3.0%</td>
<td>1.6%</td>
</tr>
<tr>
<td>2009</td>
<td>2.9%</td>
<td>-6.5%</td>
<td>4.5%</td>
<td>1.4%</td>
<td>0.4%</td>
<td>-2.2%</td>
<td>0.8%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year</th>
<th>Return on equity</th>
<th>CBZ</th>
<th>ZB</th>
<th>Stanbic</th>
<th>Banc ABC</th>
<th>Barclays</th>
<th>Stan Chart</th>
<th>Market</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>32.6%</td>
<td>15.0%</td>
<td>37.0%</td>
<td>25.5%</td>
<td>5.2%</td>
<td>26.5%</td>
<td>17.2%</td>
<td></td>
</tr>
<tr>
<td>2011</td>
<td>31.6%</td>
<td>16.5%</td>
<td>32.3%</td>
<td>20.4%</td>
<td>4.2%</td>
<td>40.7%</td>
<td>21.0%</td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td>39.2%</td>
<td>5.5%</td>
<td>28.4%</td>
<td>16.0%</td>
<td>-4.1%</td>
<td>26.2%</td>
<td>12.5%</td>
<td></td>
</tr>
<tr>
<td>2009</td>
<td>23.9%</td>
<td>-17.0%</td>
<td>35.4%</td>
<td>14.0%</td>
<td>4.5%</td>
<td>-15.8%</td>
<td>6.1%</td>
<td></td>
</tr>
</tbody>
</table>


Holding other things constant charging excessive lending rates should result in higher profitability levels. An analysis of the banks’ profitability levels using the key ratios of return on assets and return on equity gives an indication that banks are not
earning super or abnormal profits. From the figures contained in the table above, there is lack of evidence that banks are charging exorbitant lending rates which in turn translates into abnormal profits. The major reason supporting banks’ levels of profitability under the multi-currency regime in Zimbabwe is that the level of average return on assets and return on equity ratios are in line with both regional and international benchmarks.

4.3 CHAPTER SUMMARY AND CONCLUSION
This chapter discussed the main research findings based on the survey research study in an endeavor to answer the research objectives and questions. The major finding coming from the research study is the view that bank lending rates are excessive by any yardstick under the multi-currency regime in Zimbabwe, although there are many factors discussed to support their existence. Also covered in this chapter is the investigation of factors affecting high nominal bank lending rates and determinants of cost of funding for banking institutions under dollarization in Zimbabwe. The results from the research came up with a ranking of the determinants of cost of funding starting with the most appropriate to the least appropriate.
CONCLUSIONS AND RECOMMENDATIONS

5.0 INTRODUCTION
This chapter presents the conclusions and recommendations of the research, which are underpinned by the findings obtained in the previous chapter. The conclusions and recommendations outlined below have been reached by way of linking to research questions discussed in Chapter 1. This section is earmarked to provide answers to research questions, marking the ending of the research exercise. Other areas covered in this section are to present a validation of the research proposition and to suggest further areas of study.

5.1 CONCLUSIONS
This research study made the following key conclusions:

• The perception on the weighted average lending rates under the multi-currency regime is that they are excessive by any yardstick. The study showed that the average weighted lending rates obtaining in the multi-currency regime are around 17%. Although the nominal bank lending rates are excessive, they are justified by varied factors and as such are seen to be optimal in the given economic circumstances.

• It was obtained from the survey strategy that the excessive lending rates are attributable to the following:
  ✓ Zimbabwe is a high cost economy. The high cost economy is largely as a result of high staff costs mainly salaries, IT costs, cash in transit charges, communication and utility costs as the major contributors.
  ✓ Liquidity constraints
  ✓ High credit risk
  ✓ Limited access to lines of credit
  ✓ High perceived country risk
As long as the above mentioned factors persist lending rates will remain excessive under the multi-currency regime in Zimbabwe and therefore there is need for consented efforts to urgently resolve them.

• The majority of banking institutions are determining bank lending rates based on bank’s individual average cost of funding method plus a margin up to 12.5%. The cost of funding varies from one bank to the other. Reserve Bank Zimbabwe (2013) states that the average net interest margin of banks is in the region of 7.5% well below the 12.5% mark up. The margins vary from one bank to the other with the more risk larger banks having lower margins as compared to smaller banks whose customers are largely SMEs. The current method of determination of nominal bank lending rates is in line with the research findings, however, there is need to include administrative or operating expenses directly linked to sourcing of deposits as part of the cost of funding. The exclusion of these administrative costs has an underpricing effect on the nominal bank lending rates. Given these fundamentals, nominal bank lending rates ought to be higher that the prevailing levels under the multi-currency regime.

• According to the research findings, the money market rate plus margin is the most ideal model for the determination of bank lending rates in a dollarized economy holding other things constant. The situation in Zimbabwe under the multi-currency regime reveals that the money market is nearly nonexistent which is characterized by minimal activity. Given this revelation about the current status on the money market plus margin model the research is recommending the cost of funding plus margin model in determination of bank lending rates as long as the money market is nonexistent. The recommended cost of funding model should be a refinement of the current model through factoring in of administration expenses directly associated with sourcing of deposits.
5.2 RECOMMENDATIONS

Recommendations from the research study findings are discussed below based on the major players in the determination of bank lending rates.

Ministry of Finance.

The Ministry of Finance has an active role to play in the determination of bank lending rates through implementation of national policies that support low bank lending rates. There is need to put in place measures that promote a low cost business operating environment, through ensuring that the most critical services and goods are accessed at fair prices. Such services and goods should include utilities and other public services. It is critical that the ministry of finance work on mending and improving relations with the International financiers in order to inject necessary liquidity into the economy that is important for easing liquidity constraints and assisting in meeting working capital requirements for industries. Achieving smoother relations with international financiers demands a clear demonstration of financial discipline on the part of the government by prioritizing the essential expenditures. Also critical is the vigorous efforts to negotiate for new lines of credits to add to the existing PTA, Afreximbank and African Development Bank facilities to ensure the continued growth of total bank deposits is attained thus leading to liquidity improvement. The current negative BOP deficit position should be managed away gradually by ensuring that both the current and capital account report surplus positions. This can be achieved through improving exports revenue mainly from the agriculture and mining sectors by increasing volumes and quality and implementing strategies that promote foreign direct investment like intellectual property rights.

Reserve Bank of Zimbabwe

The current state of the RBZ depicts undercapitalization to which the research is recommending through the Ministry of finance an address to this problem by providing for funding to the central bank as an issue of high priority. These funds can be raised locally and or external to the country. Once capitalised, the RBZ should resume lender of last resort functionality. This function is important in reducing
banks’ cost of funding as the banks are freed from picking deposits at punitive rates whenever they experience short positions. There is need for the review of the Banking Act to ensure that its roles are aligned to a dollarized environment to allow the central bank to carry out its duties for effectively. The central bank is recommended to grow and improve depositor confidence in the banking sector, through promotion of high banking standards and improvement on corporate governance matters of the RBZ and individual banking institutions. Growth in depositor confidence will lead to easing of the liquidity constraints obtaining in the multi-currency regime due to the benefits of financial inclusion such that the US$2 billion money estimated to be circulating in the unofficial system will find its way into the official system. The RBZ should maintain standing arrangements with the largest depositors in the economy like NSSA and Old Mutual so that these institutions provide deposits to banks at reasonably lower rates.

**Banking Sector**

It is imperative for the banking institutions to think outside the box, if excessive bank lending rates are to be arrested in the multi-currency regime in Zimbabwe. Money circulating in the informal sector which is estimated at around $2 billion need to be tapped into the formal system through innovative products development. Banks can reduce operating costs by adopting strategies that rely more on mobile and e-banking products instead of the traditional investments in brick and mortar that are expensive. Future banking should be telecommunications driven. There is need for banking institutions to pay deposit rates that are enough to compensate for account service charges or account maintenance charges inorder to encourage a high savings culture. A savings culture will be key to do away with transitory deposits. There is need for banking institutions to improve depositors’ trust on banks by maintaining high corporate governance principles. International banks have a comparative advantage on access of offshore lines of credit due to their relationship with foreign parent companies and it is important to utilize this advantage. Whilst the international banks have this advantage they are not keen to commit funds into the economy when there is policy inconsistence and perceived high country risk. There
is need to maximize on the potential of international banks to access offshore lines of credit.

5.3 VALIDATION OF RESEARCH PROPOSITION

The research proposition that bank lending rates under dollarization in Zimbabwe are exorbitant is significant according to the evidence of this research finding and therefore stands and cannot be rejected.

5.4 AREAS FOR FURTHER STUDY

Theresearcher recommends for a research on the determination of the ideal range of margin that should be added unto the model of choice to avoid over or under pricing of loans as further area of study.
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Dear Sir or Madam

My name is Lincoln Chowa. I am a final year student studying towards the attainment of a Masters in Business Administration degree, at the University of Zimbabwe’s Graduate School of Management. I am required to submit a dissertation project as part fulfillment of the program requirements. The title of my research is determination of bank lending rates under the multi-currency regime in Zimbabwe. Please note that it is the nominal bank lending rate that is being referred.

I have designed a questionnaire to assist in gathering the relevant information.

With this background, you are kindly being requested to complete in full the questionnaire in an unbiased manner.

I promise to ensure that the information you are going to provide on the questionnaires will be treated with the privacy and confidentiality it deserves and will be used only for academic purposes.

My contact details are as follows:

Email: lincolnchowa@gmail.com  Cell no: 0772 127 482
The questionnaire is comprised of two sections namely Section A and Section B. Section A is concerned with the general information whilst Section B is intended to cover information that will assist in addressing the research topic.

In answering the questionnaire please indicate your opinion with an “X” where necessary

Some of the questions will require you to make use of the Five Point Likert’s scale varying from strongly disagree to strongly agree as indicated below:

<table>
<thead>
<tr>
<th>STRONGLY DISAGREE</th>
<th>DISAGREE</th>
<th>NEUTRAL</th>
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<th>STRONGLY AGREE</th>
<th>DON’T KNOW</th>
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<td>4</td>
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</tbody>
</table>

SECTION A: GENERAL INFORMATION

1. Group of respondent
   a) Ministry of Finance [   ]
   b) Reserve Bank of Zimbabwe [   ]
   c) Banking Sector [   ]
   d) Other [   ]

2. Have you accessed a loan from any banking institution in the multi-currency regime in Zimbabwe
   a) Yes [   ]
   b) No [   ]

3. If you have marked yes in question 2, what is your class
   a) Corporate [   ]
   b) SME [   ]
   c) Microfinance [   ]
   d) Individual [   ]
   e) Other [   ]

4. If you have marked yes for accessing a loan in multi-currency, what’s the average duration of the loan/(s)
a) Less than 6 months [  ]
b) 6 months to 12 months [  ]
c) Above 1 year to 2 years [  ]
d) Above 2 years [  ]

5. Highest level of Qualification
   a) Primary [  ]
   b) Secondary [  ]
   c) Certificate [  ]
   d) Diploma [  ]
   e) Degree [  ]
   f) Masters Degree [  ]
   g) PHD Degree [  ]
   h) Professor [  ]

SECTION B: DETERMINATION OF BANK LENDING RATES UNDER THE MULTI-CURRENCY REGIME IN ZIMBABWE

<table>
<thead>
<tr>
<th>STRONGLY DISAGREE</th>
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<th>STRONGLY AGREE</th>
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<td>6</td>
</tr>
</tbody>
</table>

6. Current level of lending rates obtaining in multi-currency regime in Zimbabwe

Overall weighted average bank lending rates are exorbitant in Zimbabwe
Corporate weighted average bank lending rates are exorbitant in Zimbabwe
SME weighted average bank lending rates are exorbitant in Zimbabwe
Microfinance weighted average bank lending rates are exorbitant in Zimbabwe
Individual weighted average bank lending rates are exorbitant in Zimbabwe
The overall weighted average lending rate is about 17%
7. If you have marked 1 and 2 on the overall average lending rate being about 17%, what is the range of weighted average bank lending rate according to your understanding

a) 5-9%  

b) 10-14%  

c) 15-19%  

d) 20-24%  

e) 25-29%  

f) 30-34%  

g) Above 35%  

<table>
<thead>
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<th>DISAGREE</th>
<th>NEUTRAL</th>
<th>AGREE</th>
<th>STRONGLY AGREE</th>
<th>DON’T KNOW</th>
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<td>2</td>
<td>3</td>
<td>4</td>
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<td>6</td>
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</table>

8. Determination of bank lending rates under multi-currency regime in Zimbabwe

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Determination of bank lending rates is currently based on benchmarking</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Determination of bank lending rates is currently obtained from the forces of demand and supply (market determined)</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>There is no basis for the determination bank lending rates in Zimbabwe currently</td>
<td></td>
<td></td>
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<tr>
<td>Poor credit risks is causing high lending rates under the multicurrency system</td>
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<tr>
<td>Huge Balance of payments deficits is causing high lending rates under the multicurrency system</td>
<td></td>
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<td></td>
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<tr>
<td>Political risk is causing high lending rates under the multicurrency system</td>
<td></td>
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<td></td>
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<tr>
<td>Nature of deposits that are transitory is causing high lending rates in Zimbabwe</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Banks are being forced to provide long term funding which tie their liquidity causing high lending rates</td>
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</tbody>
</table>
9. Specify if there are other methods being used in the multi-currency regime to determine bank lending rates

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

10. What is the most significant factor causing excessive lending rates in the multi-currency from the factors mentioned earlier plus any other

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

<table>
<thead>
<tr>
<th>STRONGLY DISAGREE</th>
<th>DISAGREE</th>
<th>NEUTRAL</th>
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<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>

11. Determination of bank lending rates under multi-currency regime in Zimbabwe

| Determination of bank lending rates under the multicurrency regime should be controlled 100% by the central bank | 1 | 2 | 3 | 4 | 5 | 6 |
| Determination of bank lending rates under the multicurrency regime should be left to the market forces 100% |  |  |  |  |  |  |
| Determination of bank lending rates under the multicurrency regime should be a combination of market forces and control |  |  |  |  |  |  |
12. Indicate by ranking the factors below affecting cost of funding in the multi-currency regime in Zimbabwe using a scale with 1 being the most appropriate i.e 1, 2, 3, 4, 5, 6 etc

<table>
<thead>
<tr>
<th>Determinant of bank lending rate</th>
<th>Ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating costs</td>
<td></td>
</tr>
<tr>
<td>Inflation</td>
<td></td>
</tr>
<tr>
<td>Interest expense</td>
<td></td>
</tr>
<tr>
<td>Credit risk</td>
<td></td>
</tr>
<tr>
<td>Cost of capital</td>
<td></td>
</tr>
<tr>
<td>Deposit insurance cost</td>
<td></td>
</tr>
</tbody>
</table>

13. Indicate by ranking the methods below for the determination of bank lending rates under the multi-currency regime in Zimbabwe using a scale with 1 being the most appropriate i.e 1, 2, 3, 4, 5, 6 etc

<table>
<thead>
<tr>
<th>Method of determination of bank lending rate</th>
<th>Ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Money market rate plus margin</td>
<td></td>
</tr>
<tr>
<td>Inflation plus markup</td>
<td></td>
</tr>
<tr>
<td>Offshore lines of credit average cost plus margin</td>
<td></td>
</tr>
<tr>
<td>Bank average cost of funding plus margin</td>
<td></td>
</tr>
</tbody>
</table>