GRADUATE SCHOOL OF MANAGEMENT

MASTER OF BUSINESS ADMINISTRATION

AN INVESTIGATION OF THE SUFFICIENCY OF CREDIT RISK MANAGEMENT IN THE BANKING SECTOR
THE CASE OF ZIMBABWE

BY

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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 I. KWESU
JULY, 2012
DECLARATION

I Herrison Matsongoni 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, and that it has not been submitted in part or in full for any other degree to any other university.

________________________ Date__________
Student signature

________________________ Name: I. Kwesu Date:__________
Supervisor’s Signature
DEDICATION

This master piece of work is dedicated to my family and my late father Eriya Jona Kwanga ‘Mona’ Matsongoni who taught me to dare and gave me the freedom to follow the dictates of my conscience.
ACKNOWLEDGEMENTS

I am grateful to my supervisor, Mr I. Kwesu, Graduate School of Management (GSM), University of Zimbabwe, for his able guidance and inspiration throughout my dissertation work, which has helped me in completing this study successfully. He has provided me with all the required guidelines and he spared his valuable time to discuss various issues and offer suggestions. It is no exaggeration to say that his contribution has shaped this work. I profoundly thank him.

I once again give thanks to senior management for all the commercial banks and senior management from the Reserve Bank of Zimbabwe for participating in the Survey and also for providing the much needed information especially Reserve Bank of Zimbabwe’s Banking Licensing, Supervision and Surveillance Division (BLSSD).

I would also like extend my heartfelt thanks to my wife Mercy and my sons Harrison (jnr) Anesuishe and Hilliard Atikudzaishe who have always been a source of encouragement to me during the time I was engaged with this study. Lastly, I would like to thank my parents for teaching me to dare and for giving me the freedom to follow the dictates of my conscience.
ABSTRACT

This study sought to investigate the sufficiency of credit risk management in the banking banking sector in Zimbabwe, and reviews the existing literature on the sufficiency of credit risk management in banking sector in developing countries by studying the case of the Zimbabwean financial sector, which experienced severe banking crisis mainly because of poor credit risk management in the period between 2000 to 2011.

The study adopted a qualitative research design approach. The population of this study consisted of players in the banking sector in Zimbabwe. To ensure uniformity and because of their role the main focus on extending loans to clients, commercial banks only were considered for this survey. A total of seventeen (17) questionnaires were administered commercial banks to senior risk managers. Interviews were carried out with senior management from the Reserve Bank of Zimbabwe and the commercial banks.

Results of the study showed that while the banking sector had credit risk management systems in place these were considered to be insufficient as to ensure banking sector stability in Zimbabwe. Governance systems were also weak to support a robust credit risk management system. Failure to adopt Enterprise Risk Management means that a number of banking institutions are managing some risks in isolation, which in many cases lead to underestimation of total risk the institution faced. Major issues that the study unearthed include the issue on Non Performing Loans management, inadequate provisioning and poorly performing insider loans. Further there were issues of management overriding systems put in place to ensure to manage credit risk in the banking institutions. Regulatory authorities have also been lax in managing sector wide credit risk.

The study recommends that the banking sector adopt a new credit risk management framework that addresses risks holistically. Governance systems also need to be
strengthened as they underpin a stronger risk management culture. Institution supporting credit risk management like credit bureaus should be established and regulatory authorities should rethink bank supervision.
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ABBREVIATION AND ACRONYMS

“RBZ” Reserve Bank of Zimbabwe

“US” United States.

“GPA” Global Political Agreement.

“IMF” International Monetary Fund

“FSAP” Financial Sector Assessment Programme.

“MES” Marginal Expected Shortfall.

“FFSA” Finland Financial Supervision Authority.

“EU” European Union.

“MBS” Mortgage Backed Securities

“ERP” Enterprise Risk Management

“ERM” Enterprise Risk Management.

“NPL” Non Performing Loan

“BLSSD” Banking Licensing Supervision and Surveillance Division
CHAPTER 1
INTRODUCTION

1.1 INTRODUCTION

The recurrence of financial crises in both advanced and emerging markets throughout the 1980s and 1990s and in the more recent 2008 to 2009 global financial crisis and the Eurozone debt crisis have led to an expanding literature on the determinants of financial crises (Amri, Angkinand, Wihlborg, 2011). The same developments have attracted the attention of researchers, in particular the search for reasons behind financial services sector instability and bank failures. Bank failures have been and continue to be a major public policy concern not only in Zimbabwe but also in other countries. Financial crises are of particular concern because they often have real repercussions on economic growth and employment. It is for the reason that banks are regulated more rigorously than other firms.

In most countries banks play a dominant role in the financial system, compared to equity and debt markets. Their role is similar to that of blood arteries in the human body, because financial institutions pump financial resources for economic growth from depositories to where they are required (Shanmugam and Bourke, 1990). Because of the intermediary role played by the banking sector, the collapse of the banking system is perceived to have greater adverse effects than other firms as such collapse will affect the whole economic chain.

The special characteristics of banks as providers of liquidity with longer terms assets make them vulnerable to bank runs and contagion effects from interbank positions. In times of financial distress, even a solvent bank may fail to meet its obligations given the illiquid and opaque nature of its assets (Amri, Angkinand, Wihlborg, 2011). Depositors and other creditors are often unable to distinguish between solvent and insolvent banks (Diamond and Dybvig, 1983).
Commercial banks face various risks that can be categorized into three groups; financial (with credit risk being a component), operational and strategic (Cornett and Saunders, 1999). These risks have different impact on the performance of commercial banks. The magnitude and the level of loss caused by credit risk compared to others is severe to cause bank failures (Chijoriga, 2000). Credit problems, especially weaknesses in credit risk management, have been identified to be part of the major reasons behind banking difficulties. Loans constitute a large proportion of credit risk as they normally account for 10 -15 times the equity of a bank (Kirtua, 1996). Thus, banking business is likely to face difficulties when there is a slight deterioration in the quality of loans. Poor loan quality has its roots in the information processing mechanism. By virtue of their traditional role of lending function, commercial banks are more subjected to credit risk. Effective counter and preventive credit risk management systems have to be installed if banking sector stability is to be restored. Lack of sound credit risk management systems has been cited by authorities (Basel, 2004) as being among the chief cause of bank weaknesses leading eventually to bank collapse.

Further to the above, since banks are closely intertwined financially with each other, and hence exposed to each other, a failure of any one bank will lead to the collapse of a majority of other banks (contagion effect) (Chijoriga, 2000). Even though it has been recognized in the recent theoretical literature on banking sector crisis that both macroeconomic and bank level fundamentals have to be taken into account in the explanation of systemic banking sector crisis, there is little cross country empirical evidence on banking sector crisis brought about by ineffective credit risk management systems.

This chapter discusses the following issues: background to the study, statement of the problem, objectives of the research, evaluates the research questions. The significance of the study is also covered in this section whiles other sections discusses the scope and assumptions of the study respectively. In addition, the section deals with the limitations of the study and defines key terms used in the study. Lastly it concludes with an outline of the remainder of the dissertation.
1.2 BACKGROUND TO THE STUDY

1.2.1 ARCHITECTURE OF THE BANKING SECTOR

The Zimbabwean banking sector is one of the most diversified in Sub Sahara Africa and comprises 25 operational banking institutions, 16 licensed Asset Management Companies and 172 microfinance institutions under the supervision of the Reserve Bank as at the end of December 2011.

Table 1.1: Structure of the Banking Sector

<table>
<thead>
<tr>
<th>Type of Institution</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial Banks</td>
<td>18</td>
</tr>
<tr>
<td>Merchant Banks</td>
<td>2</td>
</tr>
<tr>
<td>Building Societies</td>
<td>4</td>
</tr>
<tr>
<td>Savings Bank</td>
<td>1</td>
</tr>
<tr>
<td>Finance House</td>
<td>0</td>
</tr>
<tr>
<td>Discount Houses</td>
<td>0</td>
</tr>
<tr>
<td>Total Banking Institutions</td>
<td>25</td>
</tr>
<tr>
<td>Asset Management Companies</td>
<td>16</td>
</tr>
<tr>
<td>Microfinance Institutions</td>
<td>172</td>
</tr>
</tbody>
</table>

Source: Mid-Term Monetary Policy, Reserve Bank of Zimbabwe, 31 July 2012

*Capital Bank Limited (formerly ReNaissance Merchant Bank Limited was not involved in the survey)

1.2.2 STATUS OF THE BANKING SECTOR

The period 2003 to 2004 which coincided with the appointment of Gideon Gono as the new Reserve Bank of Zimbabwe Governor saw an unprecedented collapse of several financial institutions and others being placed under curatorship or being forced to merge. Prior to the year 2004, a broad range of corrective measures were applied on a number of banking institutions by the Reserve Bank of Zimbabwe (RBZ) in an effort that
An Investigation of the Sufficiency of Credit Risk Management in the Banking Sector: A Case of Zimbabwe

was aimed at averting the threat to the survival and stability of the entire financial services sector.

Several studies that have been carried out into the banking sector collapse have tended to concentrate of the role of weak corporate governance structures at the collapsed banks and early warning signals or factors explaining banking crisis. The studies have tended to place most of the blame for the collapse on weak corporate governance structures without delving further into the problem. The literature has so far been unable to produce a general consensus on the key causal factors leading to banking crises. Insufficient credit risk management systems continue to be the main cause of banking sector vulnerabilities worldwide (Basel Committee on Banking Supervision, 1999). According to Chijoriga (2000), lending has been and still is the mainstay of banking business and this is true to emerging economies like Zimbabwe where capital markets are not yet well developed. To most of the transition economies, however, and Zimbabwe in particular, lending activities have been controversial and a difficult matter.

The recent meltdown of the US mortgage market and the resultant collapse of some institutions that were previously thought as failure, proof highlights this fact. The Central Bank of Bahamas (2003) concurred that failure to adopt and adhere to sound credit policies and procedures is often a source of financial sector crisis. It further suggested that the major negative consequence which arises from poor credit risk management is the impairment of capital and liquidity.

The banking sector remained largely stable although the monetary authorities remain concerned about the low levels of capitalization of many commercial banks. In June 2010, seventeen (17) out of twenty-four (24) banking institutions (excluding POSB and the microfinance) were in compliance with the prescribed minimum paid-up capital requirements (RBZ Monetary Policy Statement, July 2010). The seven (7) of unqualifying institutions have been directed to either raise fresh capital from existing shareholders bringing in new partners without any further delays.
1.2.3 TOTAL BANKING SECTOR LOANS AND ADVANCES

Loans and advances in Zimbabwe are dominated by commercial banks with a market share of 82.92% of total loans, amounting to USD2,712.07 million. (RBZ, Monetary Policy Statement, July 2012). Lending activities have been increasing as well with figures from the central bank showing that loan and advances grew from USD154.92 million from 30 April 2009 (RBZ Monetary Policy Statement, July 2009) to USD1,669,277,825.30 in January 2011 (RBZ Monetary Policy Statement, January 2011) between the period April 2009 and January 2011 respectively.

With the growth in loans and advances, credit risk issues also begin to grow. For example average loans to deposit ratio for the banking sector increased from 33.22% from 30 April 2009 (RBZ Monetary Policy Statement, July 2009) to 65.01% in January 2011 (RBZ Monetary Policy Statement, January 2011) (between April 2009 and January 2011. As at 31 January 2011 some banks had loan to deposit ratios above 100% as shown in table 1.2 below;
Table 1.2: Loans to Deposits Ratios as at 31 December 2010

<table>
<thead>
<tr>
<th>Name of Institution</th>
<th>Total Loans and Overdraft</th>
<th>Total Deposits</th>
<th>Loan to Deposits Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agribank</td>
<td>30,279,740.11</td>
<td>24,740,194.02</td>
<td>122.39%</td>
</tr>
<tr>
<td>BancABC</td>
<td>129,014,875.21</td>
<td>211,426,832.43</td>
<td>61.02%</td>
</tr>
<tr>
<td>Barclays</td>
<td>43,638,980.00</td>
<td>172,995,527.00</td>
<td>25.23%</td>
</tr>
<tr>
<td>CBZ</td>
<td>431,699,789.87</td>
<td>572,900,927.41</td>
<td>75.35%</td>
</tr>
<tr>
<td>FBC</td>
<td>73,482,046.22</td>
<td>134,941,093.16</td>
<td>54.45%</td>
</tr>
<tr>
<td>MBCA</td>
<td>86,619,505.57</td>
<td>68,356,458.94</td>
<td>126.72%</td>
</tr>
<tr>
<td>Kingdom</td>
<td>101,681,713.56</td>
<td>111,297,344.35</td>
<td>91.36%</td>
</tr>
<tr>
<td>MBCA</td>
<td>86,619,505.57</td>
<td>68,356,458.94</td>
<td>126.72%</td>
</tr>
<tr>
<td>Metropolitan</td>
<td>29,101,310.04</td>
<td>43,968,427.86</td>
<td>66.19%</td>
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<tr>
<td>NMB</td>
<td>62,008,242.49</td>
<td>87,898,368.10</td>
<td>70.55%</td>
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<tr>
<td>Stanbic</td>
<td>100,532,619.03</td>
<td>296,587,046.17</td>
<td>33.90%</td>
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<tr>
<td>Stanchart</td>
<td>110,536,931.82</td>
<td>217,953,691</td>
<td>50.72%</td>
</tr>
<tr>
<td>TN</td>
<td>36,691,180.54</td>
<td>53,844,841.22</td>
<td>68.14%</td>
</tr>
<tr>
<td>ZABG</td>
<td>1,516,545.45</td>
<td>14,271,448.61</td>
<td>10.63%</td>
</tr>
<tr>
<td>ZB Bank</td>
<td>72,694,258.63</td>
<td>102,092,912.68</td>
<td>71.20%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>1,309,497,738.54</strong></td>
<td><strong>2,113,275,108.95</strong></td>
<td></td>
</tr>
<tr>
<td><strong>AVERAGE</strong></td>
<td><strong>87,299,849.24</strong></td>
<td><strong>140,885,007.26</strong></td>
<td><strong>61.97%</strong></td>
</tr>
</tbody>
</table>

Source: Monetary Policy Statement Reserve Bank, January 2011

Bank capital adequacy remain precarious with current minimum capitalisation levels of US$12.5 million considered inadequate in the face of no lender of last resort. Average loan to capital ratio at the end of January 2011 was 698.40%, with CBZ having the highest total loans and overdraft to capital ratio of 3453.60% as shown in Table 1.3 below;
Table 1.3: Loans to Capital Ratios as at 31 December 2010

<table>
<thead>
<tr>
<th>Name of Institution</th>
<th>Total Loans and Overdraft</th>
<th>Minimum Capital requirement</th>
<th>Total Loans and Overdraft to Capital Ratio</th>
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<tbody>
<tr>
<td>Agribank</td>
<td>30,279,740.11</td>
<td>12,500,000.00</td>
<td>242.23%</td>
</tr>
<tr>
<td>BancABC</td>
<td>129,014,875.21</td>
<td>12,500,000.00</td>
<td>1032.12%</td>
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<td>Barclays</td>
<td>43,638,980.00</td>
<td>12,500,000.00</td>
<td>349.11%</td>
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<tr>
<td>CBZ</td>
<td>431,699,789.87</td>
<td>12,500,000.00</td>
<td>3453.60%</td>
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<td>CFX</td>
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<tr>
<td>FBC</td>
<td>73,482,046.22</td>
<td>12,500,000.00</td>
<td>587.86%</td>
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<td>-</td>
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</tr>
<tr>
<td>Kingdom</td>
<td>101,681,713.56</td>
<td>12,500,000.00</td>
<td>813.45%</td>
</tr>
<tr>
<td>MBCA</td>
<td>86,619,505.57</td>
<td>12,500,000.00</td>
<td>692.95%</td>
</tr>
<tr>
<td>Metropolitan</td>
<td>29,101,310.04</td>
<td>12,500,000.00</td>
<td>232.81%</td>
</tr>
<tr>
<td>NMB</td>
<td>62,008,242.49</td>
<td>12,500,000.00</td>
<td>496.07%</td>
</tr>
<tr>
<td>Stanbic</td>
<td>100,532,619.03</td>
<td>12,500,000.00</td>
<td>804.26%</td>
</tr>
<tr>
<td>Stanchart</td>
<td>110,536,931.82</td>
<td>12,500,000.00</td>
<td>884.30%</td>
</tr>
<tr>
<td>TN</td>
<td>36,691,180.54</td>
<td>12,500,000.00</td>
<td>293.53%</td>
</tr>
<tr>
<td>ZABG</td>
<td>1,516,545.45</td>
<td>12,500,000.00</td>
<td>12.13%</td>
</tr>
<tr>
<td>ZB Bank</td>
<td>72,694,258.63</td>
<td>12,500,000.00</td>
<td>581.55%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>1,309,497,738.54</td>
<td>187,500,000.00</td>
<td></td>
</tr>
<tr>
<td>AVERAGE</td>
<td>87,299,849.24</td>
<td>12,500,000.00</td>
<td>698.40%</td>
</tr>
</tbody>
</table>

Source: Monetary Policy Statement Reserve Bank, January 2011

*Calculations based on the minimum capital requirements of USD12.5 million for commercial banks

The above total loan and overdraft to capital ratios figures also suggest emerging issues with credit risk in the banking sector in Zimbabwe. The banking sector crisis in the developed world that was torched off by the mortgage loan crisis in 2008 and the high level of toxic asset holdings by international banks further exacerbate the concerns with sufficiency of credit risk management systems in Zimbabwe as well.
1.2.4 LEVELS OF NON-PERFORMING LOANS
1.2.4.1 STATUS OF ASSET QUALITY IN THE BANKING SECTOR
As at 31 March 2011 the ratio of non-performing loans to total loans for the banking sector was 4.72% which is a marginal deterioration from the 4.24% recorded as at 31 December 2010. The average ratio of non-performing loans for the entire banking sector was 5.83% as at 30 June 2011. For the avoidance of doubt, the ratio of non-performing loans has been averaging below 5% since March 2010 as indicated in the table below.

<table>
<thead>
<tr>
<th>Quarter Ended</th>
<th>Ratio of Non-performing Loans to Total Loans %</th>
</tr>
</thead>
<tbody>
<tr>
<td>31 March 2010</td>
<td>2.43%</td>
</tr>
<tr>
<td>30 June 2010</td>
<td>3.29%</td>
</tr>
<tr>
<td>30 September 2010</td>
<td>3.21%</td>
</tr>
<tr>
<td>31 December 2010</td>
<td>4.24%</td>
</tr>
<tr>
<td>31 March 2011</td>
<td>4.72%</td>
</tr>
<tr>
<td>30 June 2011</td>
<td>5.83%</td>
</tr>
</tbody>
</table>

Source: RBZ, Press Statement on Levels of Non-Performing Loans, August 2011

The RBZ Monetary Policy Statement (2011) outlined specific mandatory Prompt Corrective Action programs the Reserve Bank is obliged to take if Asset Quality is in breach of prescribed thresholds. The said benchmarks were as follows:

- Watch List Category: Non-performing Loans (NPLs) in excess of 10% but less than 15% of total loans;
- Close Monitoring Category: Banking Institutions with Non-performing loans in excess of 15% but less than 25%; and
- Mandatory Remedial Action Category: Banking Institutions with Non-performing loans in excess of 25%.

According to RBZ Monetary Policy Statement (2011) in spite of the prevailing liquidity challenges affecting the entire economy, the status of Asset Quality in the Banking sector, as measured by the average nonperforming loans, were not of systemic concern to the supervisory authorities. However, while several weak banks have met the capital
requirement credit risk remain high particularly for small banks that have low capital buffers (Mid-Term Fiscal Policy Review, 2012). Asset quality also has deteriorated reflecting unsound lending practices and poor risk management. Loan origination from weak bank remains strong, funded by unstable terms deposits.

Credit risk management is very essential to optimizing the performance of financial institutions and banking sector stability. Recognizing this importance, the researcher sought to investigate the extent to which poor credit risk management contributed to the challenges that were faced by the banking sector in Zimbabwe and the resultant collapse or placing of several institutions under curatorship. The researcher also focuses on investigating the present credit risk management systems employed by commercial banking institutions operating in Zimbabwe, an economy with a less developed financial sector in an effort to establish the sufficiency of credit risk management systems among various banks in Zimbabwe.

1.3 STATEMENT OF THE PROBLEM

The banking sector witnessed high levels of non-performing loans in Zimbabwe during the period 2009 to 2012 that led many to question the sufficiency of credit risk management that the banks had been employing during this period with high levels of non-performing loans being the order of the day.

1.3.1 HIGH LEVELS OF NON-PERFORMING INSIDER LOANS

According to the Reserve Bank of Zimbabwe several factors contributed to excessive levels of non-performing insider loans. These factors include extremely poor corporate governance practices, weak underwriting and monitoring standards, as well as ill-planned growth. Some banking institutions disregarded set prudential lending limits notably to insiders and related parties. In some instances, interest was not charged on insider loans and the loans were eventually written off without proper procedures being followed, including Board approvals. As a result of illicit dealings with insiders and related parties and/or due to operational losses, a number of banking institutions failed
to meet the prescribed prudential capital adequacy ratios due to high non-performing loans (Mid-Term Fiscal Policy Review, 2012).

Non-performing loans increased from 7.55% in 2011 to 9.9% in June 2012 against the internationally accepted Basel II threshold of 5% signalling the insufficiency of credit risk management in the banking sector. (Mid-Term Fiscal Policy Review, 2012). This therefore raises concerns over the quality of corporate governance and effectiveness of supervision (credit risk management) with the financial sector.

**Table 1.5: Non–performing loans: 2009 - 2012**

<table>
<thead>
<tr>
<th>Year</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mar-09</td>
<td>3.5</td>
</tr>
<tr>
<td>Jun-09</td>
<td>2.4</td>
</tr>
<tr>
<td>Sep-09</td>
<td>1.8</td>
</tr>
<tr>
<td>Dec-09</td>
<td>1.8</td>
</tr>
<tr>
<td>Mar-10</td>
<td>1.7</td>
</tr>
<tr>
<td>Jun-10</td>
<td>1.9</td>
</tr>
<tr>
<td>Sep-10</td>
<td>2.1</td>
</tr>
<tr>
<td>Dec-10</td>
<td>3.1</td>
</tr>
<tr>
<td>Mar-11</td>
<td>3.5</td>
</tr>
<tr>
<td>Jun-11</td>
<td>4.0</td>
</tr>
<tr>
<td>Sep-11</td>
<td>6.5</td>
</tr>
<tr>
<td>Dec-11</td>
<td>5.9</td>
</tr>
<tr>
<td>Mar-12</td>
<td>9.2</td>
</tr>
<tr>
<td>Jun-12</td>
<td>9.9</td>
</tr>
</tbody>
</table>

Source: Mid-Term Fiscal Policy Review, July 2012

Most of the studies however, have focused on the role played by poor corporate governance and in particular the contribution of non-core business activities on year 2004 financial sector crisis.

A major theme however, has emerged regarding the crisis that was witnessed in Zimbabwe during the period 2000 to 2011 and what was recently witnessed on the global financial markets. In most instances the crisis or bank failure was precipitated by widespread default on a loan or default by one large creditor. This is because business firms on one hand are complaining about lack of credits and excessively high standards set by banks while commercial banks on the other hand have suffered large losses on
bad loans (Richard, Chijorija, Kaijage, Peterson and Bohman (2008). This scenario has led many observers to theorise on the link between the observed crisis and the sufficiency of credit risk management systems at various financial institutions in question and the sector in general. The lag that occurs in implementation of new international default risk management systems by local commercial banks in comparison to commercial banks in developed countries is also a cause for concern as local institutions remain exposed for longer periods.

As already discussed in previous sections there are concerns with increasing total loans and overdraft to deposit ratios and total loans and overdraft to capital ratios and high non performing loans (NPL) in the banking sector in Zimbabwe. While these ratios are too high there are also concerns with the levels of economic activities in the country and the ability of many borrowers to honour their obligations. Already increasing NPL levels are a cause for concern especially against the background of stagnating economic growth and tight liquidity conditions that have characterized the market ever since the adoption of the multicurrency system. There is therefore need to investigate the sufficiency of credit risk management in banking institutions against increasing credit risk exposures.

1.4 OBJECTIVES OF THE STUDY
The research sought to achieve the following objectives.

- To evaluate the sufficiency of credit risk management policies and systems that were employed by banking institutions in Zimbabwe prior to the collapse of several banking institutions in 2003 to 2004 and under the current multicurrency system (dollarization).
- To ascertain the extent to which poor credit risk management contributed to banking sector challenges and to identify the sources/causes of credit risk failures in the banking sector in Zimbabwe.
- To solicit views from commercial banks as to the best way of determining the credit risk management framework for a developing country like Zimbabwe.
- To investigate the link between credit risk management and banking sector
stability in Zimbabwe.

- To ascertain whether commercial banks are aware of the various credit risk management policies and recommend an improvement to policies and systems that are currently being employed to manage credit risk by Zimbabwe banking institutions.

1.5 RESEARCH QUESTIONS

This study sought to provide answers to the following questions, which were considered central to attainment of the objectives of the study. In that regard the researcher would be guided by the following broad questions;

- What were the credit risk management policies that the banking sector in Zimbabwe applied prior to the banking sector crisis in 2003 to 2004? In light of the obtaining conditions then, how sufficient were these policies in mitigating potential crises?
- To what extent were poor credit risk management policies responsible for the financial sector crises in 2003 to 2004? Could better Credit Risk Management policies have helped to avoid the crises?
- What were the main characteristics of the credit risk crisis that was experienced in Zimbabwe in 2004? Is there a major theme running in all the banking failures that were witnessed during the review period?
- What is the role of credit risk management in the stability of the banking sector in Zimbabwe? If so what should be done to improve the adequacy of current credit risk management policies to ensure long term stability of the banking sector in Zimbabwe?
- Is there an ideal set of key strategic ingredients in a credit risk management model for the banking sector in Zimbabwe?
- Does credit risk management have any impact on the financial sector activities and developments in Zimbabwe and what various options are open to Zimbabwe post dollarization when local currency returns?
1.6 SIGNIFICANCE OF THE STUDY

This study reviews the literature on the sufficiency of Credit Risk Management in the banking sector in Zimbabwe by developing a study for the Zimbabwean economy, which experienced severe credit risk subsequently leading to failure of many banks between the period 2000 to 2011.

A key question for policy makers is how to determine the best Credit Risk Management Framework for a developing country which is subjected to financial crisis and close links to global financial markets.

The research would be of paramount importance in the following dimensions;

- The determination of the best Credit Risk Management Framework that suit Zimbabwe’s financial services sector. This framework would be based on a variety of factors such as specific country circumstances, the size and openness of the country to global markets and financial flows, stage of its financial development and the credibility of its policy makers and institutions.

- It would help financial institutions to develop and implement an effective default risk management framework that enhance safety and soundness of the whole financial sector.

- This research would enlighten bank regulatory authorities such as the Reserve Bank of Zimbabwe on what institutional programs should be put in place in order to ensure that the banking sector implement effective and efficient default risk management frameworks that promote bank soundness.

- The findings would also contribute significantly towards on-going efforts being spearheaded by the Reserve Bank of Zimbabwe aimed at ensuring the return to normalcy and lasting stability of the financial sector.

- The research would also assist on determination of the best prudent credit risk management systems that would go a long way in restoring a conducive investment climate and investor confidence in the role played by banking institutions and the Central Bank in economy building.
The findings would also aid the financial sector institutions to identify credit risk symptoms before they manifest themselves and this will generally assist in stabilizing the financial services sector.

1.7 SCOPE OF THE STUDY
The study covered the period 2000 to 2011 and focuses on the investigation of the sufficiency of credit risk management in the banking sector in Zimbabwe and was limited to commercial banking institutions which are traditionally exposed to high credit risk. Respondents were drawn from all the commercial banks in Zimbabwe. The RBZ was included in the study because it is the regulator of the financial sector and is the major determinant of the Credit Risk Management Framework in Zimbabwe.

In addition, data collection was limited to the Head Office of the various commercial banks since credit risk management is normally centralized at the Headquarters. The study is representative and unbiased because most of the commercial banks’ headquarters are in Harare, the capital city, which is also the hub of economic activities in the country.

1.8 ASSUMPTIONS
It was assumed that;

- the study would receive maximum cooperation from all the commercial banks and the Central Bank.
- the study would be objective in data collection and interpretation.
- the respondents would provide accurate information.
- the study would form the basis of Credit Risk Management Framework at the Reserve Bank of Zimbabwe.
1.9 LIMITATIONS OF THE STUDY

The following stumbling blocks might be faced in the research process.

- The researcher might face problems in trying to get information from the participants e.g. Reserve Bank and also some commercial banks may be reluctant to release data they may consider confidential.

- Time as well might be a major constraint considering that the researcher is also a full time employee. The study requires intensive research that should ideally be carried out over a relatively long period of time.

- Obtaining of accurate information might be difficult since respondents sometimes give response that is biased towards the Inclusive Government’s environment or simply put answers that the researcher would be expecting.

- The researcher may not be able collect all the data required and also fail to employ all the data collection methods because of financial constraints.

- Given the general optimism surrounding the post Inclusive Government under the Global Political Agreement (GPA) might lead some respondents to give optimistic responses divorced from the reality.

1.10 DEFINITION OF KEY TERMS

Risk Management – According to the Basel Committee Risk Management is defined as the process of identification, analysis and either acceptance or mitigation of uncertainty in investment decision-making (Basel Committee on Banking Supervision (1999). Essentially, risk management occurs anytime an investor or fund manager analyzes and attempts to quantify the potential for losses in an investment and then takes the appropriate action (or inaction) given their investment objectives and risk tolerance. Inadequate risk management can result in severe consequences for companies as well as individuals (Basel Committee on Banking Supervision (1999). For example, the recession that began in 2008 was largely caused by the loose credit risk management of financial firms.
Credit Risk - The risk of loss of principal or loss of a financial reward stemming from a borrower's failure to repay a loan or otherwise meet a contractual obligation. Credit risk arises whenever a borrower is expecting to use future cash flows to pay a current debt. Investors are compensated for assuming credit risk by way of interest payments from the borrower or issuer of a debt obligation. Credit risk is closely tied to the potential return of an investment, the most notable being that the yields on bonds correlate strongly to their perceived credit risk (Basel Committee on Banking Supervision (1999))

Default - The failure to promptly pay interest or principal when due. Default occurs when a debtor is unable to meet the legal obligation of debt repayment. Borrowers may default when they are unable to make the required payment or are unwilling to honor the debt. Defaulting on a debt obligation can place a bank in financial trouble. The lender will see a default as a sign that the borrower is not likely to make future payments (Finland Financial Supervision Authority (FFSA), 2001)

Non Performing Loans (NPL) - A sum of borrowed money upon which the debtor has not made his or her scheduled payments for at least 90 days. A non-performing loan is either in default or close to being in default. Once a loan is non-performing, the odds that it will be repaid in full are considered to be substantially lower (Richard et al, 2008).

BASEL I - A set of international banking regulations put forth by the Basel Committee on Bank Supervision, which set out the minimum capital requirements of financial institutions with the goal of minimizing credit risk. Banks that operate internationally are required to maintain a minimum amount (8%) of capital based on a percent of risk-weighted assets. The first accord was the Basel I. It was issued in 1988 and focused mainly on credit risk by creating a bank asset classification system.

Reserve Bank of Zimbabwe (RBZ) – The central bank of the Republic of Zimbabwe
1.11 OUTLINE OF THE DISSERTATION

The dissertation is arranged as follows:

**Chapter 1:** Gives a background and introduction to the study including statement of the problem. The chapter clearly puts across the problem under investigation.

**Chapter 2:** reviews the available literature on credit risk and management and banking crisis in particular taking into consideration the different theoretical aspects and findings of previous studies in this field. The aim of the literature review is to demonstrate a clear and sound theoretical underpinning of the study and to show the importance or necessity of the research topic.

**Chapter 3:** Covers the methodology applied during the study. Justification of the methods and instruments used are detailed here.

**Chapter 4:** Details the results of the study and an analysis of the same is done with the aid of statistical tools. The study findings are also discussed in this chapter.

**Chapter 5:** This will focus on the conclusion and recommendations arising from the analysis of the study findings. Areas of further research are also suggested in this chapter.

1.12 CHAPTER SUMMARY

The first chapter introduces the reader to the area being researched. Chapter 1 discusses the introduction to the study area and it consist of the introduction, research background, research problem, research objectives, research questions, the significance of the study as well as the limitations of the study. Chapter one also contains a format of the study which outlines what will be covered by each Chapter in the research (dissertation) project.
CHAPTER 2
LITERATURE REVIEW

2.1 INTRODUCTION

This chapter reviews theoretical and empirical literature on credit risk management systems in banking institutions. Differences in views among various authors on credit risk management systems and banking sector stability are discussed in this chapter. The chapter discusses various issues relating to credit risk management; definition of credit risk, credit risk management, models of credit risk management, an ideal credit risk management framework, credit risk management policies and guidelines, credit risk modeling, an integrated approach to credit risk management and banking crisis. According to Global Association of Risk Professionals (GARP) (2010), risk is part and parcel of business operations and is inherent in all aspects of a commercial operation. These operations include personnel management, regulatory risk, management information systems, business funding and is inherent in strategy formulation for the business. Risk is therefore present at all layers of the organisation. However, for banks and financial institutions credit risk is the most important factor to be managed. The chapter also reviews literature on related party lending within financial institutions and its effects on credit risk. Further the chapter also discusses the global financial crisis of 2008 as it relates to credit risk management.

2.2 CREDIT RISK DEFINED

The Basel Committee on Banking Supervision (1999) defines credit risk as the probability that a borrower will not own its obligations as per the agreed terms. For most banks, who advance money during the ordinary course of their business, loans are the largest and most obvious source of credit risk.

The Global Association of Risk Professionals, (2010) defined credit risk as ‘the potential that a borrower or counter-party will fail to meet its obligations in accordance with the agreed terms.’ It is the probability that an institution will suffer a loss arising from a credit transaction that it enters into during the ordinary course of business.
The European Central Bank (2007), defines credit risk as the risk of losses due credit events, i.e. default (an obligor being unwilling or unable to repay its debt) or a change in the quality of the credit (rating change).

Credit risk is the current and prospective risk to earnings or capital arising from an obligator’s failure to meet the terms of any contract with a bank or otherwise to perform as agreed. (RBZ, Bank Licensing, Supervision and Surveillance, Guideline No1-2006/BSD). Credit risk is found in all activities where success depends on counterparty, issuer, or borrower performance.

2.2.1 SOURCES OF CREDIT RISK

As banks are in the business of extending credit to customers, loans are the largest and most obvious source of credit risk (Basel Committee on Banking Supervision, 2000). These loans are given by banks in the form of corporate lending, sovereign lending, project financing and retail lending (Basel Committee on Banking Supervision, 2000). Loans are however not the only source of credit risk as there are other activities of the bank that give rise to credit risk. These activities include the banking book and in the trading book and both on and off the balance sheet (Basel Committee on Banking Supervision, 2000). As the banks engage in many other activities apart from extending of loans and new products emerge they increasingly face credit risk in various instruments other instruments like acceptances, interbank transactions, trade financing, foreign exchange transactions, financial futures, swaps, bonds, equities, options and in the extension of commitments and guarantees and the settlement of transactions Basel Committee on Banking Supervision, 2000).

Basel Committee on Banking Supervision (2000) argues that since exposure to credit risk continues to be the leading source of problems in banks world-wide, banks and their supervisors should be able to draw useful lessons from past experiences. Banks should now have a keen awareness of the need to identify, measure, monitor and control credit risk as well as determine that they hold adequate capital against these risks and that they are adequately compensated for risk incurred.
Broadly credit risk encompasses default risk and market risk. Default risk is the objective assessment of the likelihood that counterparty will default. On the other hand market risk is an attempt to quantify the financial loss that would arise in the event of client default (Basel Committee on Banking Supervision (2000). Credit risk includes not only the current replacement value but also the potential loss from default.

The Basel Committee on Banking Supervision (2000) lists the components of credit risk as follows;

- Credit growth in the organization and composition of the credit portfolio in terms of sectors centers and size of borrowing activities so as to assess the extent of credit concentration.
- Credit quality in terms of standard, sub-standard, doubtful and loss-making assets.
- Extent of the provision made towards poor quality credits.
- Volume of off-balance-sheet exposures having a bearing on the credit portfolio.

Thus credit involves not only funds outgo by way of loans and advances and investments, but also contingent liabilities. Therefore, credit risk should cover the entire gamut of an organisation’s operations whose ultimate ‘loss factor’ is quantifiable in terms of money (Basel Committee on Banking Supervision (2000).

2.2.2 FORMS OF CREDIT RISK

According to the (Basel Committee on Banking Supervision (2000) the following are the forms of credit risk;

- Non-repayment of the principal of the loan and/or the interest on it.
- Contingent liabilities like letters of credit / guarantees issued by the bank on behalf of the client and upon crystallization- amount not deposited by the customer.
- In the case of treasury operations, default by the counter parties in meeting the obligations.
- In the case of securities trading, settlement not taking place when it is due.
In the case of cross-border obligations, any default arising from the flow of foreign exchange and/or due to restrictions imposed on remittances out of the country.

RBZ, Bank Licensing, Supervision and Surveillance, Guideline No1-2006/BSD and the Central Bank of Bahamas (2003), The Bank of Mauritius (2000) and the European Central Bank (2007) concurs with the Basel Committee on Banking Supervision (2000) on the various forms of credit risk. According to Berger and Young (1997), credit risk can be classified in the following way:

- **Credit default risk** - The risk of loss arising from a debtor being unlikely to pay its loan obligations in full or the debtor is more than 90 days past due on any material credit obligation; default risk may impact all credit-sensitive transactions, including loans, securities and derivatives.

- **Concentration risk** - The risk associated with any single exposure or group of exposures with the potential to produce large enough losses to threaten a bank’s core operations. It may arise in the form of single name concentration or industry concentration.

- **Country risk** - The risk of loss arising from a sovereign state freezing foreign currency payments (transfer/conversion risk) or when it defaults on its obligations (sovereign risk).

The Global Association of Risk Professionals (GARP) (2010) emphasizes that credit risk in more important for banks than market risk. Important considerations for credit risk measurement include probability of default for a particular loan obligation, exposure at default and loss given default. Haneef et al (2012) provide the following definitions for the above terms. Probability of default (PD) is the likelihood that the borrower will fail to make full and timely repayment of its financial obligations. Exposure at default (EAD) is the expected value of the loan at the time of default. Loss given default is the amount of the loss if there is a default, expressed as a percentage of the EAD.
2.2.3 CREDIT RISK MANAGEMENT

The Finland Financial Supervision Authority (FFSA) (2001) defined credit risk as the risk that a borrower may not perform the obligations of his/her loan relationship to a lending institution such that the collateral pledged by the borrower is insufficient to cover the claims of the lending institution. The Central Bank of The Bahamas (2003) also defined credit risk management as a process of controlling the impact of credit risk-related events on a loan granting institution. Credit risk arises from uncertainty in a given counterparty’s ability to meet its obligations. Richard, Chijorija, Kayage, Peterson and Bohman (2008) states that the management of credit risk in the banking industry follows the process of risk identification, measurement, assessment, monitoring and control. It involves identification of potential risk factors, estimate their consequences, monitor activities exposed to the identified risk factors and put in place control measures to prevent or reduce the undesirable effects. This process is applied within the strategic and operational framework of the bank.

2.3 AIMS OF CREDIT RISK MANAGEMENT

Fatemi and Fooladi (2006) highlights that banks are prompted by the Bank for International Settlements (BIS) and in some cases required by regulatory mandate to be on the lookout for new means of measuring and managing their credit risk. Adding fuel to fire has been a series of related events, including; a rapid pace of product innovations, further diversification by financial institutions into new geographical and product market areas and a stepped up rate of credit intermediation (both in scope and pace).

The net effect has been that we witnessed the development of more sophisticated approaches to the measurement and the management of credit risk exposure. Included among these has been the introduction of the increasingly more sophisticated and complex hedging techniques. More intriguing and of particular interest has been the development of models that can be used to measure credit migration and default risk at the portfolio level and that can also be used to allocate capital. According to Fatemi and Fooladi (2006), these models can be broadly classified into two types; proprietary
(internal) models of credit risk management, and the vendor-marketed models which, in-spite of their general-application nature, are almost universally quite elaborate.

However, there are two main aims of credit risk management as postulated by the Basel Committee on Banking Supervision (1999) and the Central Bank of the Bahamas (2003):

- The first aim of credit risk management is to increase a loan granting institution’s risk-adjusted rate of return by maintaining credit risk exposure within acceptable limits (The Basel Committee on Banking Supervision 1999).
- However, the Central Bank of the Bahamas argued that the most important aim of credit risk management is to safeguard the safety, reputation and soundness of the loan granting institution.

Credit granting is very important especially for commercial banks which make money through the differential on interest earned on loans advanced and interest paid on deposit from the bank’s customers. Loans constitute a large proportion of the assets in most banks’ portfolio and are relatively illiquid and exhibit the highest credit risk (Koch and MacDonald, 2000). Thus, banking business is likely to face difficulties when there is a slight deterioration in the quality of loans. Credit risk management is therefore of paramount importance as failure of credit risk management could ultimately lead to collapse of the bank in the event of default (Sopas, 2005).

2.4 CREDIT RISK MANAGEMENT FRAMEWORK

According to Sopas (2005) banks should set up a credit risk management framework to ensure that credit risk is adequately addressed within the financial institution. Board and senior management oversight of the credit risk management process is very important. It is important that the Board of Directors approve credit risk strategy and other significant policies and senior management should develop and establish credit risk policies and credit administration procedures and guide staff. Board and senior management oversight sets the tone for the bank’s risk management culture.
(Greanghyt, 1952). Senior management will also be responsible for the following critical issues in credit granting and risk management:

- Setting up appropriate organization structure and specifying duties / responsibilities
- Credit management discipline
- Credit origination with emphasis on the following;
  - Assessing risk profile before extending credit
  - Cash flows and repayment capacity
  - Appropriate utilization of credit

- Limit Setting
- Credit Administration which encompasses documentation, disbursement, monitoring, repayment, credit files and collateral documents

Other important issues for credit risk management include the following issues

- Measuring Credit Risk
- Internal Risk Rating
- Rating Review
- Credit Risk monitoring and Control
- Risk Review
- Delegation of Authority
- Managing Problem Credits
Various literature states that for effective credit risk management, an organization needs to ensure that it establishes an appropriate overall credit risk environment, and that the organization operates under a sound credit granting process, maintaining an appropriate credit administration that involves monitoring process as well as adequate controls over credit risk (Basel, 1999, Greuning and Bratanovic, 2003; IAIS, 2003). It requires top management to ensure that there are proper and clear guidelines in managing credit risk, i.e. all guidelines are properly communicated throughout the organization and that everybody involved in credit risk management understand them.

Adapted from Sopas (2005)
2.5 CREDIT RISK MEASUREMENT AND MONITORING

Greanghyt (1952) argued that it was important for loan granting institution to identify and measure credit risk on a continuous basis to enable them to determine the quantity of capital required to hold against credit risks for compensation purposes in the event that borrowers defaults payments. The Central Bank of Bahamas (2003) asserted that loan granting institutions should develop sufficient credit risk management policies, procedures and adequate information systems for measuring credit risk to ensure that credit risk inherent in off-balance sheet products such as guarantees and derivative instruments is sufficiently measured, monitored and controlled.

The complexity of the credit risk measurement tools depend on the nature and degree of the inherent risks of the products involved (Johnson 2002). The Finland Financial Supervision Authority (2001) further pointed out that a loan granting institution must develop sufficient ways for measuring credit risks that are consistent with its size of operation.

Duffie and Singleton (2003) suggested that loan granting institutions should develop systems and frameworks for credit risk monitoring. Apart from concurring with Duffie and Singleton (2003), the bank of Mauritius (2003) in its guide to credit risk management further suggested that a proper credit monitoring framework prompts corrective actions when warning signs point to deterioration in the financial health status of the borrower. The bank further argued that all loan granting organisations should have systems and policies in place to review the financial health status of the borrower on a regular basis especially where the loans are big and where the borrower’s operating environment is dynamic. Duffie and Singleton (2003) pointed out that issues which must be included in the credit risk monitoring framework include size of exposure, exposure to groups of connected parties, individual product lines, economic sector of the borrower, borrowers’ demographic profiles, account performance, internal credit ratings, types and coverage of collateral and interest rate sensitivity.
2.6 CREDIT RISK MANAGEMENT GUIDELINES AND POLICIES

Lowe (2002) argues that credit risk management policies and guidelines form a cornerstone of a safe and sound banking institution. These policies and guidelines must be designed to cover all areas in relation to the identification, measurement, monitoring and controlling of credit risk. Hyutred (1987) concurred with Lowe (2002) and further argued credit risk management policies and guidelines are part of the framework for lending and they guide the loan granting activities of the bank.

Lowe (2002) suggested that the contents of an ideal credit risk management policy and guideline document should encompass the following issues. It must contain a statement of principles and objectives governing the extent to which the institution is willing to accept credit risk. The policy document must establish the areas of loan (types of credit, target industry sectors, geographical areas, countries) in which the financial institution is willing to engage and those in which it is not willing to engage. It must clearly define the levels of authority in loan appraisal. It is also important to establish prudent limits on the loan granting institution’s exposure to credit risk and on the concentration of credit risk in different areas of the institution’s loan portfolio.

Gautengh and Fertiker (1989) suggest that document of credit risk management policy and guidelines should specifically contain, inter alia, categories of loan facilities to be offered along with pricing policies, profitability targets and maximum maturities for each type of lending. It should also clearly establish a ceiling for the total loan portfolio ratios. In addition the policy document should specify loan portfolio limits for maximum aggregate exposures by country, industry and category of borrower. Credit risk policy manual should also specify acceptable collateral and the criteria for accepting guarantees.
2.7 AN IDEAL FRAMEWORK OF CREDIT RISK MANAGEMENT

An ideal credit risk management framework must include the entire cycle of a loan granting process beginning from loan origination up to a point when the loan has been finally removed from the loan granting institution’s books (Gauteng and Jellard 1921). They pointed out that major elements of that ideal credit risk management framework include loan application appraisal, loan application process documentation, loan administration support facility, loan disbursements, loan portfolio monitoring framework and loans grading and rating framework.

2.7.1 LOAN APPLICATION APPRAISAL FRAMEWORK

Koopman and Lucas (2003) defined loan application appraisal as a stage at which all the data needed on a loan applicant is gathered and involving the screening of the loan applications. Apart from concurring with Koopman and Lucas (2003), the Basel Committee on Banking and Supervision (1999) further suggested that there is need for a comprehensive analysis of the exact risk profile inherent in each prospective loan applicant before a decision to grant or reject a loan is finally reached.

According to Koopman and Lucas (2003), the factors which must be assessed in appraising loan applications encompass purpose of the loan, source of repayment, integrity of the loan applicant, the loan applicant’s sensitivity to economic and market developments, loan applicant’s performance on previous loans and financial forecasts of profitability and cashflows. Ketyanre (1956) concurred with Koopman and Lucas (2003) on the above elements of a loan appraisal but further suggested that the legal capacity of the loan applicant to assume the liability, special features and restrictions designed to limit changes in the future risk attaching to the borrower and the sufficiency and enforceability of guarantees must also be assessed when appraising the loan application.

According to Finland Financial Supervision Authority (1996), loans application appraisal should primarily consider the fact that loans must be granted on the basis of forecasted
success of the project for which finance was applied for. The Bank of Mauritius further pointed out that loans should be granted to creditworthy applicants if the loan application appraisal framework is well designed. Bratanovic and Greuning (2003) proposed that a loan granting institution must design loan appraisal policies and guidelines that cover new loan applications appraisals, appraisal of renewals by existing clients and changes in terms and conditions of previously approved loans.

2.7.2 LOAN APPLICATION PROCESS DOCUMENTATION FRAMEWORK
Gautengt and Edfhju (1945) established that the relationship between loan granting institution and the loan applicant act as the basis for any legal action therefore it is very important to document any details with regard to the loan application process. They further argued that documentation is essential at each stage of the loan application process including at stages such as loan application, loan analysis, loan approval, loan monitoring, collateral valuation, impairment recognition, foreclosure of impaired loan and realization of security. The Bank of Mauritius (1994) also suggested that loan applications must be documented regardless of whether they have been approved or rejected. Screening borrowers is an activity that has widely been recommended by, among others, Derban et al (2005). The recommendation has been widely put to use in the banking sector in the form of credit assessment.

Loan granting institutions must put in place policies and guidelines on all the information to be documented in the loan application process (Bank of Mauritius 2003). The bank of Mauritius (2003) also indicated that the depth of the information to be documented in the loan granting process depend on loan applicant’s previous performance with the institution. According to the asymmetric information theory, collections of reliable information from the prospective borrowers become critical in accomplishing effective screening.
2.7.3 LOAN ADMINISTRATION SUPPORT FACILITY FRAMEWORK.

According to the Basel Committee on Banking Supervision (1999), it is the prime responsibility of the business entity granting the loan to ensure that loans are properly administered as this is an important feature in maintaining the safety and financial integrity of the bank. Falkena and Meijer (1999) concurred but also added that the following needed to be considered when designing an institution’s loan administration function. Loan facilities must be disbursed only after all the contractual terms and conditions have been met and all the required documents received and cross checked. Further the value of the collateral must also be regularly monitored so as to ensure that the bank is always covered in the event of default. The borrower should make timely repayments of interest, principal and any agreed to fees and commissions. The bank also ought to ensure that the information provided by the borrower to credit risk managers is both accurate and timely. It is of major importance that credit risk management functions within a loan granting institution are sufficiently segregated. Credit risk management policies, guidelines and procedures as well as relevant laws and regulations are fully complied with. It is the responsibility of the bank to ensure that on-site inspection visits of the borrower’s business are regularly conducted and assessments documented.

Falkena and Meijer (1989) further suggested that loan granting institutions should ensure the following issues are adequately addressed in the credit risk management framework to ensure that banks remain sound and a safe investment destination.

- The loan administration function must be effective and efficient especially areas such as monitoring, documentation, contractual requirements and legal covenants.
- There should be adequate controls in the back office of the loan granting institution.
- Credit risk management and the loan granting process should be in line with set management policies, procedures and guidelines as well as applicable laws and regulations.
2.7.4 LOAN PORTFOLIO MONITORING FRAMEWORK.

It is critical in credit risk management to forecast and examine what probably could potentially go wrong with the overall loan portfolio if the conditions in which the borrower changes drastically (Bank of Mauritius 2003). The Basel Committee on Banking Supervision (1999) suggested that the forecasting and analysis must involve the identification of possible future anticipated changes in economic environment that can have negative impact on the credit risk. Other areas that must be examined include economic volatility, market related risk scenarios and market liquidity conditions.

2.7.5 LOAN GRANTING AND RATING FRAMEWORK.

Greuning and Bratanovic (2003) defined loan grading and rating as a process whereby a loan is allocated a risk grade that is determined by the probability of loan repayment. They further proposed that as part of credit risk management framework, all loans and other assets for which the bank is taking risks should be graded and rated. Banking institutions must develop their own loan grading and rating frameworks in consistency with the nature, size and complexity of the institution’s activities (Godlewski 2004). The authors agreed on the following issues to be taken cognisance of when designing a loan grading and rating framework.

- The loan grading and rating framework must cover all critical areas of the institution’s loan portfolio including off-balance sheet exposures.
- The framework must cover both performing and non-performing loans and assets.
- A regular and independent loan grading and rating framework must be put in place that guarantees the integrity of the loan grading process.
- The grading and rating framework must be periodically reviewed to ensure consistency in delivering reliable information.
2.8 RISK MANAGEMENT FRAMEWORK FOR A BANKING INSTITUTION.

Rojas (2000) pointed out that an integrated risk management framework is an approach to risk management that takes cognisance of the relationship between credit risk and all other risks that impacts on the banking institution. He further argued that banks must take into account the intricate relationship between credit risk and other risks to achieve effective overall risk management. In some instances, credit risk is a by product of market risk taken on in the trading book by actively trading bonds, derivatives such as swaps and forwards, and credit derivatives. In other cases like the traditional lending business, credit risk arises from actively originating, servicing and funding corporate loans or supporting lending operations.

According to Simpson (2000), effective overall risk management requires an integrated approach that takes cognisance of the inter-linkage between credit risk and other risks. Contrary to the view by some authors that credit risk is inextricably linked to other risks, Falkena (1989) argued that in contrast to interest rate risk, liquidity risk and currency risk which are all closely interlinked, credit risk stands very much on its own. He argued that once a loan has been granted, the performance of the borrower falls outside the lender although monitoring and control systems in a bank continue to provide some degree of influence. Many researchers concur that failure to link credit risk to other risks within a banking institution set up is a major handicap by some organizations. The Central Bank of Bahamas (2003) pointed out that credit risk cannot be managed in isolation as a single business plan which focus on an integrated approach to risk management is needed in ensuring the safety and soundness of the banking institution.

2.9 EMPIRICAL EVIDENCE ON CREDIT RISK MANAGEMENT IN UK

The empirical literature review is going to be discussed under the impact of technological advances on effective credit risk management framework, credit risk policies and strategies, measurement, monitoring and controlling of credit risk, credit risk management strategies, impact of capital adequacy on credit risk and impact of regulatory capital standards on credit risk.
A survey done by Lepus (1984) (a United Kingdom based investment banking management consultancy) showed that 38 percent of senior credit risk executives interviewed suggested that advanced technology helps to identify, measure and manage credit risk. The Central Bank of Bahamas (2003) concurred with Lepus (1984) and also pointed out that banking institutions must maintain a comprehensive policies, procedures and adequate information systems for measuring credit risk. Algorithmics Corporation (2001) argued that technology forms an integral element in executing the credit risk management function. Technology assists in the gathering of data on credit ratings, loss experiences, credit risk rating and default history in addition to a variety of other relevant credit risk information.

The Basel Committee on Banking Supervision (1999) pointed out that the ability to measure, monitor and control credit risk is a crucial determinant of the long-term success of any banking organisation. Moreover, in a survey conducted by Lepus (1984), of the 75 percent interviewed banks, they argued that it is vital to have the ability to measure, monitor and forecast potential credit risk exposures across the entire institution.

A research carried by Godlewski (2004) revealed that increased regulatory capital standards cause bankers to increase their portfolio credit risk. Changes in regulatory capital standards and portfolio risk are positively correlated. Blum (1999) in his research also found out that the capital regulation pushes up an undercapitalized bank to increase its credit risk appetite in a certain period in order to meet regulatory requirements in future. Rochet (1992) also found out that insufficiently capitalized banks exhibit credit risk loving behavior even if regulation makes use of credit risk-related capital ratio. Furlong and Keeley (1989) argued that increased regulatory capital standards will not push banks to increase loan portfolio risk but suggested that banks will not increase its loan portfolio risk in the face of increased regulatory standards as this reduces incentives for excessive credit risk taking. Jeitschko and Jeung (2004) found out that bank’s credit risk can either decrease or increase with capitalization
depending on the relative balance of power between deposit insurance schemes, shareholders and the managers hence further supporting the above researchers.

Pikoz and Eeyonda (1987) suggested that sound credit risk management involves establishing a credit risk philosophy, policies and procedures for prudently managing the risk-reward relationship across a variety of dimensions, such as asset quality, concentration, maturity, currency, collateral security or property and type of credit facility. Of the 25 percent of the banks included in the survey by Lepus (1984), senior credit risk executives argued that a comprehensive credit risk management policy was critical to the successful implementation of the overall risk management function. The risk managers concurred that the credit risk management policy should include a set of general principles that apply to all credit risk situations, as well as specific principles applicable to certain types of loan transactions.

A robust credit risk analysis approach is also a key component of an adequate credit risk management framework. This was one of the findings by a survey conducted by Lepus (1984) when he interviewed 53 percent of the banks in the United Kingdom. The survey also found out that efficient and accurate credit risk analysis enable managers to make better and well informed decisions. It also emerged from the same survey that credit risk managers interviewed felt that other ingredients of effective credit risk management include credit risk transparency, defined credit decision processes, sophisticated risk measurement methodologies, stress testing, timeliness and accuracy of risk calculations as well as efficient credit risk reporting.

2.10 NON PERFORMING LOAN (NPL)
According to Hou (2009), the issue of non-performing loans (NPLs) has gained increasing attentions in the last few decades. The immediate consequence of large amount of NPLs in the banking system is bank failure. Many researches on the cause of bank failures find that asset quality is a statistically significant predictor of insolvency (e.g. Dermirgue-Kunt 1989, Barr and Siems 1994), and that failing banking institutions always have high level of non-performing loans prior to failure. Hou (2009) also states
NPL are an indication of an ailing enterprise and should be a trigger mechanism for credit risk management.

Non-performing loans can lead to efficiency problem for banking sector. It is found by a number of economists that failing banks tend to be located far from the most-efficient frontier (Berger and Humphrey (1992), Barr and Siems (1994), DeYoung and Whalen (1994), Wheelock and Wilson (1994)), because banks don't optimise their portfolio decisions by lending less than demanded. What is more, there are evidences that even among banks that do not fail, there is a negative relationship between the non-performing loans and performance efficiency (Kwan and Eisenbeis (1994), Hughes and Moon (1995), Resti (1995)).

2.11 MODELING CREDIT RISK

In the current environment where technology has pervasive application in the financial services sector, computers are increasingly being used to model credit risk. However, existing mathematical credit risk models have “a tendency to underestimate the likelihood of sudden large events” (Buchanan, 2008) that are especially important in the credit markets where the tail of a distribution is key in predicting the defaults that typically have a low probability of occurrence (Murphy, 2000). The mathematical models typically fail to consider inter-related systematic risks (Jameson, 2008), and they tend to make unrealistic assumptions such as markets always being in equilibrium (NewScientist, 2008a). Despite their “poor risk modeling” in actuality (Jameson, 2008), the statistical accuracy of the models in predicting backward into the past (using historic data) resulted in the mathematical modelers developing such a “faith in their models” in forecasting the future that they began to “to ignore what was happening in the real world” (NewScientist, 2008b). This has led, sadly, to situations whereby these models have failed to correctly predict potential problems with the credit portfolios leading to some credit crisis that put the financial institutions in danger (Sabato, 2005).

Sabato (2005) suggests that these robotic financial models have failed and therefore there is need for human intervention. Some have suggested that subjective human
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judgment opens up for the possibility of undesirable human biases and manipulation. However, with or without human judgment, financial models of credit risk are subject to manipulation, both legally and fraudulently. Just for instance, “soft information” about borrowers’ capacity to repay that is difficult to communicate in mathematical models to the final investors of securitized loans is subject to manipulation by lenders seeking origination income (Rajun, Seru, and Zig, 2008). The modeling predictions at the credit rating agencies themselves (such as Moody’s and S&P) have, at least recently, been biased toward granting higher ratings than merited in order to compete for revenues from the debtors who pay to be rated, and the result has been a “colossal failure” (Burns, 2008). Based on the recent record of the relative rates of defaults on loans made using strictly “hard information” (Rajun, Seru, and Zig, 2008), it may be concluded that human judgment may, at least within the framework of normal organizational controls, have greater capacity to detect and avoid biases than mathematical models that can be more easily manipulated than thinking human beings.

2.12 RELATED PARTY LENDING AND CREDIT RISK MANAGEMENT

Lending to insiders has become a very topical issue in credit risk management, especially prior to the tightening of regulatory framework (Halling et al, 2009). Two important earlier works have provided evidence of “looting” in related lending. Laeven (2001) examines bank lending policies in Russia in the early 1990s. La Porta, Lopez-de-Silanes, and Zamarripa (2003) examine bank lending policies in Mexico in the mid-1990s. Both of these papers focus on loans to non-financial firms where either the firms are bank shareholders, or there exist bank shareholders who also hold shares in the non-financial firms. Both papers present evidence that related lending results in looting. This looting can take the form of lower interest rates and/or larger, but lower quality, loans. Halling et al (2009) also present evidence that the insider loans are often of poor quality due to poor credit risk vetting applied to such insider loans. While such transactions can provide short-run benefits for incumbents, they may be associated with longer-run costs to the bank, in particular the negative effect on the credit risk management process and quality of the loan portfolio. In earlier studies of related
lending the banks’ related borrowers lost control because of defaults, either of the banks or of the borrowers themselves. Default risk is typically endogenous in that it can be affected by the terms of the related lending.

Lamoreaux (1994) and Maurer and Haber (2007), in contrast, argue that banks can benefit from related lending, because such lending can mitigate informational asymmetries between banks and their borrowers. Halling et al (2009) however present evidence of the negative effects of insider lending to local government authorities by municipal owned banks in the European Union (EU). They argue that the loans that are usually given out to related parties are of low quality as they usually fall short on many credit risk measures like cash flows and quality of collateral if any. They further urge regulators to pay particular attention and set benchmarks on insider loans.

2.13 CREDIT RISK AND BANKING CRISIS

Literature has so far been unable to produce a general consensus of key casual factors leading to banking crises. For example, Bart etal (2006) find that official supervisory power and stricter capital requirements have no significant effect on banking crisis probabilities, while Noy (2004) and Amri and Kocher (2010) argue the opposite. Angkinand etal (2010) and Shehzad and de Haan (2009) find evidence that the direction of the effect of liberalization on banking crises depends on the strength of capital regulation and supervision. The relationship among credit growth, financial liberalization and banking crises are similarly subject to disagreements.

Amri etal (2011) argues that banking crises can be studied on the country level as well as the bank level. A banking crisis on the country level refers to a situation when there are bank failures on a large-scale in the financial system. A crisis of an individual bank can be defined more unambiguously but for policy purposes the country level is obviously more interesting from the point of view of repercussions on the real economy. On the country level, likelihood of a banking crisis, banking system instability, lack of banking system soundness and fragility are often used more or less interchangeably.
Banking, instability generally has a broader definition than banking crisis. Instability may refer to disruption in the payment system or volatility of asset prices that potentially could lead to crises (Mishkin, 1996)

2.13.1 CREDIT RISK AND BANKING CRISIS ON THE COUNTRY LEVEL

To identify episodes of banking crises caused by bank runs, data on bank deposits could in principle be used. Crises originating on the asset side of banks’ balance sheets through the deterioration of asset values could be identified by studying, for example non-performing loans. Amri et al (2011) highlights that in most cases the data for non-performing loans is not available for a long time span and also in some instances the reliability and comparability of the non-performing loans is questionable where inflation is high and in a cross-country analysis. Most countries have been reluctant to reveal the existence of severe banking problems in official statistics and the definition of non-performing loans varies from country to country although some convergence is ongoing.

2.13.2 INDICATORS OF BANKING SECTOR FRAGILITY AND DISTRESS OF INDIVIDUAL BANKS

There are a number of proxies for financial stability indices for financial soundness and financial stress based on various components of balance sheet and market data for the banking sector. For example Corsetti et al (2001), use non performing loan as an indicator of financial instability but only if there is a presence of a lending boom. Das et al (2004) construct an index of financial system soundness from the average of the capital ratio and the (inverted) ratio of non-performing loans to assets. This index is weighted by the credit to gross domestic product (GDP) ratio in order to capture the extent of financial intermediation in a country.

Kibritcioglu (2002) constructs a financial fragility index using proxies for liquidity risk (bank deposits), credit risk (bank credit to the domestic private sector) and exchange rate risk (foreign liabilities to banks). Illing and Liu (2006) and Hakkio and Keeton (2009) create an index of financial stress using the market data such as the bond spreads for
various bond types. An extreme value of the index is used to identify periods of financial crises.

The International Monetary Fund (IMF) performs country studies on the health of the banking system under the Financial Sector Assessment Program instituted (FSAP) by the IMF (2003) and the World Bank. Indicators of the health of the banking system in each country are presented in these occasional studies. Indicators included in the financial stress index are falling asset prices, exchange rate depreciation and/or losses of foreign reserves, insolvency of market participants, defaults of debtors, rising interest rates and increasing volatility of financial market returns. These indicators of financial stress are used as leading indicators of weaknesses and disruptions of the financial system.

There is no clear consensus on how a bank’s contribution to the systemic risk should be measured. Drehmann and Tarashev (2011) uses variables such as bank size and interbank lending and borrowing as measures of a bank’s systemic importance. A group of researchers at New York University have developed an early warning measure geared towards providing a signal for the contribution of individual banks to systemic risk. This measure, the Marginal Expected Shortfall (MES), is an equity market-based signal and it depends on the volatility of a bank’s equity price, the correlation with the market return and the co-movement of the tails of the distributions. Thus, it is designed to capture special characteristics of the tails of distributions associated with systemic shocks. The MES is described in Brownlee and Engle (2010).

Mendoza and Terrones (2008) as cited by Karimov (2008) argue that credit booms were preceded by financial liberalization in 20 percent of cases. Amri etal (2011) find that the interaction between credit growth and financial liberalization is significant in predicting banking crisis probability but credit growth alone is not.
2.13.3  MEASURES OF CREDIT GROWTH

The role of credit growth has been a source of disagreement within the banking crisis literature. There are theoretical as well as empirical grounds for the diverging views of credit booms. Proponents of the predominant view point to the boom-bust credit cycle explanation, along with distorted incentives to allocate credit away from market-determined criteria during periods of credit expansion. The relationship between rapid credit growth and banking crises remains controversial although most studies reveal a link between credit growth and subsequent crises and as such credit risk management is of paramount importance.

2.14  A CASE STUDY OF GLOBAL FINANCIAL SERVICES CRISIS

The banking panic in the fall of 2008, threw economies around the world into severe recession. The seeds of this panic were sown in the credit boom that peaked in mid-2007, followed by the meltdown of sub-prime mortgages and all types of securitized products. When analyzing the global financial crisis, most people start with the US housing market before 2006, focusing primarily on the subprime mortgage market. They also focus on the unscrupulous and greedy tendencies of the financial institutions and the unsustainable property market bubble that they torched starting in 2006. Whereas this is largely true, it does not tell the whole story of a poor regulatory framework in which the regulators naively believed that the financial institutions could be trusted to regulate themselves, which, in large part is a major contributor to the financial crisis that almost brought the global economy to its knees. Hunter, 2008, also suggests that risk management at most financial institutions was very lax and they failed to enforce the basic rules of safe business i.e. avoid strong concentrations and minimize volatility of returns. Several excuses have been presented to hide this failure (e.g. limited role of risk management, inability to influence business decisions, incapacity of forecasting such a severe crisis, etc). Although some of these excuses may be partially true for some institutions, however the risk management function at most of the financial institutions clearly showed significant weaknesses and failures, in particular credit risk management (Hunter, 2008).
Hunter (2008) gives the following account of the global financial crisis and the role played by poor credit risk management in Mortgage Bases Securities (MBS); It is clear that there were many factors that contributed to the financial crisis, but those directly connected to financial institution insolvency seem to be the most important. Here the term financial crisis is used to refer to a circumstance where banks in the financial system stop lending money in the interbank market en masse. That effectively happened on, or about, October 8, 2008 when the Federal Funds Rate hit a high of seven percent in intraday trading. So the question is what led to the decision for these banks to stop lending to each other? Most reports on the slow-down in inter-bank lending have pointed to suspicion on the part of financially sound banks that their counter-parties in an inter-bank loan might be on the brink of insolvency. The implication is that some banks are afraid loans made to other banks might not be repaid if the borrowing bank becomes insolvent.

Most explanations for the concern over bank solvency refer to the presence of toxic assets. These toxic assets are also referred to as MBS. The claim is that the market for MBS has become illiquid, meaning that no buyers can be immediately found for the MBS who are willing to pay a price reasonably close to what the banks paid for the MBS.

In fact, it is more correct to say that the declines in MBS values are due to a sudden revelation about the increased risk associated with owning these assets. Prior to the financial crisis, banks viewed MBS as low risk assets and now they are viewed as being much more risky. So the question of MBS toxicity is really a story about information, or lack of information about the risk of owning MBS. Pricing credit risk is always challenging. When risks have significant financial consequences, finding an expert is a usual and prudent choice. Bond rating agencies are the experts in this area. When a MBS is offered for sale, a bond rating agency rates the risk of the mortgage pool primarily on the reputation of the securitizing insurer. This practice led to MBS receiving risk ratings that were far lower than the inherent risk of default in the underlying pool of mortgages.
Sabato (2009) articulates that most bank’s businesses were driven by market demand and they didn’t have a clear capital allocation strategy which resulted in over exposure to certain markets. Articulating risk appetite is a complex task which requires the balancing of many views (Sabato, 2009). A number of factors goes into process and many of these are judgemental and can not be easily quantified. A well crafted risk appetite framework will allow senior management to have a clear picture of what they are doing and the amount of risk the bank is being exposed to. It provides a clear picture of where it currently stands and how it wants to grow in terms of concentration and expected returns of its assets (Sabato, 2009).

While many financial institutions, particularly the very large ones, have adopted Enterprise Risk Management (ERM) they are still using reactive rather than proactive methods of risk monitoring and detection (D’Arcy and Stephen, 2001). These approaches are increasingly becoming inadequate in the face of diversified risks that the banks now face. These approaches are also segregated and are independent which does not allow for seamless integration with other risk management modules (Sabato, 2009).

Portfolio selection strategies have been a major topic in the literature during the last 60 years and especially after the well known Markowitz’s article (1952). Although banks are major investors on the financial market, no study has been carried out on how these can be applied to bank. Portfolio selection theories like risk and returns and are important in allocating capital and managing financial risks (Sabato, 2009).

Sabato (2009) further content that in implementing this cultural change, most banks focused mainly on the expected return side of their investment leaving the risk side out. As a result banks began to chase returns without adequately providing for risk. This resulted in highly concentrated portfolios and diversification was sacrificed in chasing market share growth. This was highly risky and as a result pricing was mainly focused at growing market share and not profitability. (Sabato, 2009).
While there is no literature describing how to define risk appetite for a bank, the Markowitz (1952) portfolio selection theory is quite easy to apply in banking scenarios as the theory clearly explains how to build the most efficient investment portfolio finding the right balance between expected returns and volatility of losses. He demonstrates that diversification is the best tool to reduce the risk of the entire portfolio.

Clearly, the risk function of a financial institution cannot define a risk appetite framework by itself, but will need the help of the business (sales) department to model the expected returns. Only if risk and business people join their efforts, it will be possible to articulate a consistent and effective risk appetite framework.

Financial institutions and the academic world have been extensively discussing about enterprise risk management (ERM) for the last ten years. A lot of papers and books have been written on this topic providing clear guidelines and theoretical background to support this fundamental change in risk management. However, as of today, few banks have tried to implement ERM and even less have been successful in embedding it in the bank’s risk management culture (D’Arcy and Stephen, 2001)

2.15 CHAPTER SUMMARY

This chapter has discussed literature on the credit risk management. It is important for management to set up a framework for managing credit risk in the bank. The chapter also reviewed literature on the global financial crisis of 2008 and the role played by poor risk management at the financial institutions during the period preceding the financial crisis. Research findings will be based on this literature.
CHAPTER 3

RESEARCH METHODOLOGY

3.1 INTRODUCTION

This chapter mainly focuses on the research design and research instruments used to collect data. The chapter also discusses and presents a justification for the use of sampling methods used and research instruments. Theoretical and empirical underpinnings of credit risk management and banking sector stability discussed in the previous chapter played a critical role in selecting best research method to achieve the objectives. The chapter also discusses the data collection procedures adopted for the study and how the raw data collected using the research instruments was processed and manipulated.

Different techniques and methods were used in carrying out research in order to increase validity and reliability of the data gathered. Research data was collected from both primary and secondary sources.

3.2 RESEARCH PHILOSOPHY

The study is qualitative as the objective was to investigate, examine, analyse and interpret the observations for the purpose of discovering underlying meanings and patterns of relationships in a manner that does not involve mathematical models. The qualitative approach was adopted in order to have an in-depth understanding of the sufficiency of credit risk management in the banking sector in Zimbabwe. Qualitative research can also be viewed as an approach which involves methods of data collection and analysis that are non-quantitative.

The qualitative model was chosen as appropriate for this study as an investigation of the sufficiency of credit risk management in the banking sector in Zimbabwe between the period 2000 to 2011 cannot be modeled mathematically because of distortions in the figures in Zimbabwe which was caused by high inflation. Further, this model was considered appropriate in capturing the opinions of various commercial banks in the
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financial sector in Zimbabwe. A qualitative investigation was therefore considered more appropriate.

3.3 RESEARCH DESIGN
This study is descriptive as it is concerned with documenting the sufficiency of credit risk management in the banking sector in Zimbabwe for the period 2000 to 2011 and recommending the best credit risk management framework for the Zimbabwean situation. It also aimed to solicit views from commercial banks as to what should be done to improve credit risk management in the Zimbabwean financial sector. This study was a qualitative study which attempted to capture a population’s characteristics by making inferences from a sample of commercial banks and the regulatory authority which is the Reserve Bank of Zimbabwe. Data was collected through interrogation of all the commercial banks in Zimbabwe and most of the information was obtained from the Head Office.

The study used the survey method. This was considered appropriate as it is less costly to interrogate a sample of commercial banks. The questionnaire method used was also less costly and less time consuming so that the study could be completed in time.

3.4 SUBJECTS / TARGET POPULATION
The population for this study consisted of (authorised dealers) registered commercial banks operating in the Zimbabwe. Also included in the population is the Reserve Bank of Zimbabwe which is the regulatory authority of all the financial institutions.

The commercial banks included in the study are BanABC, ZB Commercial Bank, Commercial Bank of Zimbabwe (CBZ), Zimbabwe Allied Banking Group (ZABG), Premier Banking Corporation, Stanbic Bank, First Banking Corporation (FBC), Agribank, Kingdom Bank, Merchant Bank of Central Africa (MBCA), CFX, Standard Chartered, Metropolitan, Trust Bank, Royal Bank, TN Bank and Barclays. Owing to their great participation in lending commercial banks were the prime targets as the researcher
expected them to supply first hand information on the sufficiency of credit risk management systems.

### 3.5 SAMPLE SELECTION AND DATA COLLECTION

In this study, the respondents were senior representatives of authorized dealers / commercial banks with in-depth knowledge of credit risk management systems. The researcher used judgmental sampling method to choose only commercial banks for data gathering because they are the traditional money lenders prone to high credit risk. However, the researcher noted that there are not the only money lending group of financial institutions but this was done to ensure a degree of homogeneity among data drawn from banking institutions.

Furthermore senior risk managers such as credit risk managers, managing director, finance managers; chief executive officers and company secretaries were selected based on judgmental sampling because of their knowledge of credit risk management in commercial banks. Interviews were also carried out with the Senior Staff in Banking Supervision and Surveillance Division at the Reserve Bank of Zimbabwe to get an in-depth understanding of credit risk management from the regulatory authority perspective.

Questionnaires were sent to all the commercial banks with head offices in Harare. This was because the number was small and it was considered not appropriate to use sampling. Questionnaires for commercial banks were sent for the attention of senior risk managers within the respective treasury departments. The questions in the questionnaires required such data as opinion on credit risk management and opinion on the best credit risk management framework for Zimbabwe to adopt post the dollarisation when the Zimbabwe dollar makes a return. In the Financial Services Industry since there is competition concerns some senior managers are reluctant to disclose detailed information about their credit risk management policies later alone the best credit risk management policy desirable. Due to this well-documented reticence in disclosing
sensitive data, some information was requested in closed questions format rather than absolute facts.

3.6 RESEARCH INSTRUMENTS

The tools that the researcher used for collecting information were questionnaires and interviews. The research instruments used in this research are outlined below; including a justification of their use.

3.6.1 QUESTIONNAIRES

Questionnaires are used extensively in SME financing research (e.g. Norton, 1991, Michaelas et al., 1998), and the use of questionnaire surveys has recently come back into vogue in corporate finance as witnessed by recent seminal studies (e.g. Graham and Harvey, 2001) and also a special issue of The International Journal of Managerial Finance (Vol.3, no. 1, 2007).

Questionnaires were administered to senior risk managers of the selected commercial banking institutions. The questionnaire covered a broad array of issues concerning the sufficiency of credit risk management in Zimbabwe. The questions were designed specifically to obtain in-depth information on the sufficiency of credit risk management policies and strategies, soundness of the credit granting processes and procedures, effectiveness of credit administration, measurement and monitoring systems and data pertaining to the extent to which poor credit risk management has contributed to the challenges faced by banks in Zimbabwe in recent years.

3.6.1.1 ADVANTAGES OF USING QUESTIONNAIRES

The use of questionnaires in this study was justified for the following reasons:

- It was possible to administer and send them to all the commercial banks at the same time.
- The responses in all the questionnaires would be in a standardized way hence the tool was more objective. This would make it easier to compare and analyse responses from questionnaires and also compare different banks.
• The method was cost effective and convenient in collecting data.
• Questionnaires were easy to monitor and follow up. In addition questionnaires were very effective in soliciting descriptive responses.
• Use of questionnaires saved time as compared to interviews and minimized the need for physical presence by the researcher during data collection.
• Questionnaire could be used to gather different types of data from a wider variety of sources and they enabled the researcher to gather facts, figures, amounts, statistics, dates, attitudes, opinions, experiences, events, assessments and judgment during a single contact.

3.6.1.2 LIMITATIONS OF QUESTIONNAIRES
However, despite the above mentioned advantages questionnaires have the following drawbacks as data collection tools:
• Not many people may be keen to go through the questionnaire; hence the response rates were lower than expected. To ensure a higher response rate follow up were made both through telephone and emails.
• Some of the respondents could have given incorrect and false answers wanting to shed off the hassle of filling in questionnaires.
• Some senior credit risk managers and executives were reluctant to disclose certain data they regarded highly confidential.
• Some questions were left unanswered.
• Some of the respondents could have misinterpreted the questions and ended up giving wrong information. Questions were made as clear as possible and easy to understand. In addition, the researcher made follow ups on some of the questions so as to ensure that they were clearly understood
3.6.1.3 MEASURES TO ENSURE HIGHER RESPONSE RATE

To counter the effect of the above weakness the researcher took the following precautions in designing the questionnaire:

- The questionnaires were made user friendly by use of clear, simple and straightforward English, in particular the use of jargon outside credit risk management was minimised.
- Careful attention was given to the designing and analysis of the questionnaire.
- The participants were given reasonable time to respond to the questionnaires (two weeks). The researcher and assistants collected completed forms from the premises of respondents and in cases where this was not possible, a return envelop was supplied.

3.6.2 INTERVIEWS

The study utilized interviews to collect data from respondents in addition to the questionnaires. The main justification of using interviews is that respondents were able to expand on areas of interest and use of non-verbal clues such as facial expression to emphasize their responses. The other advantages are listed below:

- Answers are provided immediately and the researcher was given more attention and detailed data on credit risk management.
- There is room for further explanations, which makes it easier for the researcher to seek clarification where there is need. Questions asked could be rephrased to ensure that they were adequately understood. The respondents also had room to ask for clarification if the questions were not clear.
- Interviews offers the researcher both verbal and non-verbal (gestures) responses and this contributed to the capturing of some essential information.

The main disadvantage of interviews is that they were time consuming and expensive to conduct especially in this day when transport cost is high and petrol is expensive. The researcher used interviews to gain more insight in the area of credit risk management from bank examiners in the Reserve Bank’s Banking Supervision and Surveillance Division and senior officials at the Reserve Bank of Zimbabwe.
Also to note is that the interview process consumed a lot of time because interviewees were in most cases very busy. Appointments were sometimes called off because more pressing issues had arisen. Sometimes the interview was interrupted when the interviewee needed to attend to some urgent issues.

3.7 DATA COLLECTION PROCEDURES

A number of procedures were used in collecting the data from the respondents. A part time experienced research assistant was engaged at a nominal fee to assist with data collection. The procedure used for questionnaires was as follows:

- The researcher and assistant researcher physically visited the commercial banks head offices in Harare. Senior bank examiners were chosen randomly from the Banking Supervision and Surveillance Division for in-depth interviews.

- On the initial visit to commercial banks, a letter by the researcher was left to the attention of the senior risk manager, finance manager and / or senior official of the bank for an appointment to be set up since in the majority of cases clearance was needed before the questionnaire could be administered. In some cases access was granted to the senior risk manager/ bank secretary on the first visit to the commercial bank.

- Where access was granted on the first visit, questionnaires were administered, completed and returned while the researcher waited. In most cases questionnaires were left for completion.

- Using contact details obtained on the first visit, an appointment was made with key management through telephone and emails and questionnaires administered on the second visit, either while the researchers waited or left for completion.

- Follow up calls were made to remind about completion of the forms and to clear up any areas that were not easily understood. Appointments for collection of completed forms were also made during the follow up calls. The completed forms were collected in person by the researcher and assistant researcher.
Appointments for interviews were made by telephone and email with key personnel from the treasury departments of commercial banks. All answers were recorded manually during the interviews. Follow up telephone calls were made to clear up some issues raised during the interviews.

3.8 DATA PROCESSING, ANALYSIS AND PRESENTATION

To prepare for data entry, questionnaires were given unique codes for all responses from respondents and a data entry template was designed in Excel. The data was entered using the same package. After entry, the data was cleaned to remove inconsistent responses by running frequency tables in the Statistical Package for Social Sciences (SPSS) version 11. The data was then analysed using SPSS version 11. In data analysis and interpretation, statistical principles like frequencies, percentages and mean were mainly used. Tables, graphs, charts and qualitative summaries were used in presentation of research findings which are laid out in Chapter iv.

3.9 CHAPTER SUMMARY

This chapter discussed the research design to be adopted by the study and the justification thereof. Furthermore, the chapter reviewed concepts such as the population of the study, research instruments, data collection procedures, data analysis and presentation. The next chapter will present the results of the study and analysis of the results.
CHAPTER 4
DATA PRESENTATION

4.1 INTRODUCTION

In this chapter primary data from the research is presented, analysed and interpreted. Secondary data from previous research related to the current study is also presented and also compared with data from the current study. The chapter presents a detailed discussion of the research findings with the aid of various statistical measures and analysis techniques. Graphical tools are used to present the data from the study and these tools include graphs, charts as well as tables. The primary data collected was critically analysed in terms of key areas of the research questions to be tested.

4.2 PRIMARY DATA PRESENTATION

4.2.1 DEMOGRAPHIC DATA

4.2.1.1 RESPONSE RATE

A total of seventeen (17) questionnaires were sent to commercial banks head offices in Zimbabwe for the attention of the Risk Managers at the respective institutions. Of these questionnaires sent out fifteen (15) were returned, but one was rejected implying a response rate of 94% of which 88% were valid and the data considered in data analysis. The questionnaire rejected was due to the fact that the responses were poorly presented as to invalidate the whole questionnaire. Interviews were also scheduled with six experts in risk management from some of the commercial banks and also with senior bank examiners from the Reserve Bank of Zimbabwe (RBZ). Five of the scheduled interviews were successfully carried out and the other interview could not be conducted due to time constraint as the scheduled interviewee was out of the country most of the time. The success rate for the interviews was therefore 83%. The overall success rate for both questionnaires and interviews was therefore 91% which the
researcher considered high and satisfactory as to give valid results which could be used to make conclusions.

4.2.1.2 GENDER AND QUALIFICATIONS OF RESPONDENTS

The respondents were all Risk Managers or equivalent designation within their respective institutions. The gender distribution of the respondents was as shown in the chart below (Figure 4.1).

The majority of the respondents (88%) were male with only 12% females. The results indicate that at middle management level at least the risk management function in Zimbabwe financial institutions is dominated by males. The figure below shows that all the respondents had a Bachelors’ degree or higher, although only six (6%) had a PhD or studying towards a PhD.

Figure 4.1: Gender of Respondents

Figure 4.2: Educational Qualifications of Respondents
The results show that the majority of the respondents (56%) had a Bachelors degree and 39% had a Masters qualification which shows that the professionals in the financial services sector are well educated. The results however do not indicate the relevance of the qualifications to that particular industry.

4.2.2 CREDIT RISK MANAGEMENT FRAMEWORK

4.2.2.1 DOCUMENTATION OF CREDIT RISK MANAGEMENT PROCESS

Respondents were asked if their institutions had the credit risk management systems properly documented in terms of the following key areas: Risk Management Framework, Risk Policy and Enterprise Risk Management and the results were as shown in the figure below.

Figure 4.3: Documentation of Risk Framework

The results show that all the financial institutions (100%) have a documented risk management framework identifying all the risks that the institution faces. However, only 87% have a documented Risk Policy in place while the remainder (13%) do not have a
Risk Policy document in place. The results also showed that 27% of the commercial banking institutions had not implemented an Enterprise Risk Management (ERM) system which allows risks to be managed holistically by taking into account interrelatedness between different risk categories. The results are consistent with Lepus (1984) findings which showed that on 25% of the banks in the study had an ERM. More recent studies also support these findings (Jeitschko and Jeung, 2004). The results show that generally the risk management environment in Zimbabwean banking institution is well cultured. Some of the institutions that are slow in embracing ERM, however, have resulted in lowering the overall risk management rating for the local banking sector.

4.2.2.2 RISK MANAGEMENT CULTURE

In all banking institution the Board of Directors has an important role in the risk management process. The Board of Directors is responsible for setting up the overall risk control environment (Sopas, 2005). Respondents were asked about the role of the Board of Directors in the risk Management process. The results were that in all (100%) of the institution the Board of Directors had overall responsibility for the risk management process as they were responsible for setting the risk management culture for the organisation.

All the respondents (financial institution) also had an Asset and Liabilities Committee (ALCO) or an equivalent Risk Management Committee responsible for addressing all risks at board level. These results tie well with the recommendations in Greanghyt (1952) which recommend that risk be addressed at the highest level in a banking institution. As per recommendations of the RBZ, all financial institutions should have a board committee to address risk issues at the highest level. From the results it appears risk is being adequately addressed at the highest level in financial institutions in Zimbabwe. However, these results do not say anything about actual implementation.
4.2.2.3 CONTENTS OF CREDIT RISK MANAGEMENT FRAMEWORK

Table 4.1: Contents of Risk Management Framework

<table>
<thead>
<tr>
<th>Item</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identification of all risks faced by the institution</td>
<td>93%</td>
</tr>
<tr>
<td>Assignment of responsibilities for risk management</td>
<td>87%</td>
</tr>
<tr>
<td>Development of risk manuals</td>
<td>67%</td>
</tr>
<tr>
<td>Establishment of risk department</td>
<td>80%</td>
</tr>
<tr>
<td>Establishing risk measures</td>
<td>80%</td>
</tr>
<tr>
<td>Using technology in risk management</td>
<td>40%</td>
</tr>
<tr>
<td>Establishing risk parameters</td>
<td>20%</td>
</tr>
</tbody>
</table>

Respondents were asked to state some of the main points addressed in their respective institution’s credit risk management frameworks. Almost all the respondents (97%) indicated that their frameworks identify all the risks that the institution is exposed to while 87% indicated that the frameworks assign responsibilities for credit risk management. 80% of the respondents indicated that the risk management framework established a standalone risk department. Areas that are not adequately addressed include; the use of technology in credit risks management (40%), establishing of risk parameters (20%). While the results show that most of the important issues are addressed in the majority of the institutions, it may be difficult to implement sound credit risk management in some due to lack of adequate coverage of lower level issues like use of technology and establishing parameters. According to Lowe (2002), risk management guidelines should contain certain minimum standards in order to ensure that risks are adequately covered. The level of compliance is also in line with recommendations of Hyutred (1987).
4.2.2.4 SUFFICIENCY OF CREDIT RISK MANAGEMENT FRAMEWORK

The figure above shows that 47% of the respondents thought that credit risk management frameworks in the banking sector in Zimbabwe were not sufficient. The major problem area cited was that of senior management overriding controls; especially on credits to related parties. Some of the respondents also cited limited use of technology in credit risk management and lack of tools to carry out proper credit risk modeling. From the results we conclude that there are still some problem areas in some financial institutions in credit risk management in Zimbabwe. Gautengh and Fertiker (1989) clearly point out the pitfalls of insufficient risk management frameworks and its effect on individual bank stability and, through systematic risk, the whole banking sector.

4.2.2.5 REVIEWING CREDIT RISK MANAGEMENT FRAMEWORKS

Respondents indicated that overall risk management framework, credit risk management frameworks and credit risk manuals were regularly reviewed in order to make them relevant to situations obtaining on the ground (Lepus, 1984). Figure 4.5 below shows entities responsible for reviewing credit risk management frameworks in respective institutions.
The research also sought to investigate the practice of reviewing risk management framework within the financial institution. Frequent reviews are necessary given the dynamic banking environment that has been obtaining for much of this century (Lowe, 2002). The results were as shown in Figure 4.8 below.
4.2.2.6  EXTERNAL GUIDELINES ON RISK MANAGEMENT FRAMEWORK

Respondent banks indicated that they all made reference to Reserve Bank of Zimbabwe guidelines on credit risk management. They also indicated that they also subscribed to the Bank of International Settlements (BIS) guidelines on credit risk management. Because of the immediate supervision of the RBZ, all the banks were compliant with RBZ requirements while the level of implementation of the BIS guidelines was varied. To the extend that external credit risk management guidelines result in increased banking sector stability, Zimbabwean banking system is largely safe. However, as the most important thing is implementation (Basel Committee on Banking Supervision 1999), it may be necessary to probe further the level of compliance.

4.2.3  LOAN GRANTING AND MONITORING PROCESS

4.2.3.1  LOAN GRANTING SYSTEMS

All the respondents indicated that their institutions had loan granting systems in place and they were asked to describe how the system works in terms of certain criteria in order to test the robustness of the loan granting systems. The results were as shown in the table below.

A total of 63% of the institutions in the study reviewed their risk framework within two year; the majority of which reviewed their frameworks within 1 to 2 years. 27% of the respondent institution reviewed their policies less regularly. The results show that in terms of reviewing risk policies and frameworks, the performance of the banking sector is commendable and hence contributing to a more stable banking sector in Zimbabwe.
Table 4.2: Contents Loans Granting Systems

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Properly documented</td>
<td>93%</td>
</tr>
<tr>
<td>Decision making structure</td>
<td>93%</td>
</tr>
<tr>
<td>Fully automated</td>
<td>47%</td>
</tr>
<tr>
<td>External assessments</td>
<td>20%</td>
</tr>
<tr>
<td>Qualitative reviews</td>
<td>80%</td>
</tr>
<tr>
<td>Quantitative review</td>
<td>100%</td>
</tr>
</tbody>
</table>

The majority of the institutions (93%) indicated that they had properly documented loan granting systems with a clearly defined decision making structure. All the respondents also indicated that their loan granting systems included quantitative reviews of borrowers. From these results it can be concluded that banks place a lot of emphasis on figures. Only 20% of the institutions employ external assessments when granting new loans. External assessments are very important in so far as they reduce bias as they give an institution an independent view on a borrower. About half of the respondents (47%) reported that they have fully automated systems for credit granting while the remainder have manual or partially automated systems. The results show that loan granting systems in the financial institutions are not completely adequate as there are loopholes in their overall design. Koopman and Lucas (2003), suggest a framework of loan granting appraisal set to minimize overall credit risks. From the respondent data, the Zimbabwean banking sector falls short in this regard.

4.2.3.2 LOAN GRANTING SYSTEMS AND CREDIT RISK MANAGEMENT

Loan granting systems act as the first line of defence against credit risk as they ensure that only sound credit assets are created (Ketyanre, 1956). Respondents were asked to comment on whether they considered the loan granting systems in their institution as adequate to ensure banking sector stability. The results were as shown in Figure 4.7 below.
A total of 47% of the respondents were not sure that the loan granting systems within the financial institutions were adequate to ensure banking sector stability given the impact of credit risk on overall banking sector stability. The figure is quite high and suggests that there may be need to revisit credit granting systems within financial institutions. Some of the respondents felt that systems as currently designed did not allow for making risk scores at origination of loan assets and inadequate information was available to make loan decisions. The RBZ (2003) also noted that the quality of loan assets created by a number of financial institutions were very low.

4.2.3.3 CREDIT PROVISIONING AND NON PROVISIONING AND NON PERFORMING LOANS MANAGEMENT

Respondents were asked if loan loss provisioning within their institutions were influenced by non-performing loans and the responses were as shown below.
The majority of the respondents (73%) indicated that the levels of non-performing loans (NPL) influenced loan provisioning within their institutions. The remaining institutions (27%) did not consider NPLs in determining provisioning levels. Provisioning levels to a great extent should be influenced by an institution’s perception of credit risk levels. The 27% institutions who do not consider NPL may be underestimating credit risk levels within their portfolios; which impacts negatively on banking sector stability by way of increasing systematic risk. Non Performing Loan (NPL) provisions are regarded as a controlling mechanism over expected loan losses. Previous practices shown that provisions are triggered by default incidents on loans, higher level of nonperforming loans are associated with high rates of provisioning (Hasan and Wall, 2004).

4.2.3.4 CREDIT ASSETS MANAGEMENT SYSTEM

Once a loan relationship has been established, it is important to keep monitoring the performance of the loan arrangement in order that steps may be taken to minimize credit risk (Greuning and Bratanovic, 2003). Respondents were asked about their opinion on the sufficiency and their opinions on loans management systems in place within the various financial institutions. The results were as shown in Fig 4.9 and Table 4.3 below.
According to the chart above 67% of the respondents considered loans management systems to be adequate, 20% were unsure and the remainder 13% felt that the systems were inadequate. Loans management systems are generally adequate in ensuring overall banking sector stability. The table below shows some of the major respondent concerns on loans management system.

**Table 4.3: Major concerns of loans management system**

<table>
<thead>
<tr>
<th>Concern</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low level of automation</td>
<td>20%</td>
</tr>
<tr>
<td>Can not consider qualitative data</td>
<td>47%</td>
</tr>
<tr>
<td>Poor reporting quality</td>
<td>33%</td>
</tr>
<tr>
<td>Lack of credit risk scoring</td>
<td>53%</td>
</tr>
</tbody>
</table>

The major concerns with the available loans management system that respondents felt negate banking sector stability were lack of credit scoring and inability to consider qualitative information. These concerns were reported by 53% and 47% of the respondents respectively. Low level of automation of the systems and poor report
generation were cited by 20% and 33% of the respondents respectively. These results suggest that there are still issues with loans management systems at a number of financial institutions in the country which could adversely impact on overall banking sector stability in Zimbabwe.

### 4.2.3.5 MANAGING RELATED PARTY CREDITS

Related party loans are always a problem area for risk managers and are a problem area for credit risk management (La Porta, Lopez-de-Silanes, and Zamarripa, 2003). This is because there is much scope for management override of controls put in place to mitigate high credit risk. The chart below shows responses from respondents when they were asked if they considered related party loans to be troublesome within their institutions and their impact on bank solvency and overall banking sector stability.

![Figure 4.10: Managing related Party Loans](image)

A good 40% considered related party loans to be issues of concern within their institutions while the remainder didn’t consider related party loans to be of concern. This shows that related party loans are still significant within many of the local financial institutions. These results are consistent with the findings of Laeven, (2001), which examined related party lending in Russia. The study, including that by Halling et al
(2009), provide evidence of looting in that the loans are usually of a high credit risk rating. Respondents also gave varied reasons why related party loans were difficult to manage in their institutions and the results are tabulated below.

Table 4.4: Concerns with Insider Loans

<table>
<thead>
<tr>
<th>Concern</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management override</td>
<td>87%</td>
</tr>
<tr>
<td>Credits usually of lower quality</td>
<td>60%</td>
</tr>
<tr>
<td>Usually poorly performing</td>
<td>47%</td>
</tr>
<tr>
<td>Effect on liquidity</td>
<td>73%</td>
</tr>
<tr>
<td>Low scoring on credit risk measures</td>
<td>67%</td>
</tr>
</tbody>
</table>

The majority of the Risk Manager (87%) report that there is still concern with management override of controls when it comes to related party loans at their institutions. A similarly high number of respondents (73%) reports concerns with the effect on liquidity and 67% report that insider loans are usually low scoring on internal risk measure. A smaller percentage of the respondents (47%) report that the insider loans are usually poorly performing. Halling et al (2009) also present evidence that the insider loans are often of poor quality due to poor credit risk vetting applied to such insider loans and these results agree with this finding and contrast sharply with the assertions of Lamoreaux (1994) and Maurer and Haber (2007) who argued that insider loans had much to recommend for given that they addressed the information asymmetry problem associated with borrowers withholding certain information in a bid to strengthen their loan applications. These results suggest that there are issues with insider loans in Zimbabwe and this could negatively impact on credit risk management and banking sector stability. Despite the efforts of the banking authorities to discourage insider lending, banks still make them and from the results of this study Risk Managers are also worried about their effect on risk and overall banking sector stability.
4.2.3.6 NEW LOANS APPROVAL FRAMEWORK

Approvals for new loans is an important stage in credit risk management and setting up a clearly defined approval framework is very important in managing credit risk before it manifests (Pikoz and Eeyonda, 1987). All the respondents reported that they had clearly defined loan approval frameworks. However, some concerns came out from the responses and these included the following:

- Worries with skills available for doing credit assessment as most qualified persons had relocated to the Diaspora,
- Concerns with management override of the whole credit assessment process,
- Lack of external ratings
- Lack of capacity by available system to manipulate qualitative data

Results show that the loans approval framework is generally sound although areas of concern still remain. Deficiencies at any one institution have far reaching consequences through the domino effect.

4.2.3.7 MEASURING AND MONITORING CREDIT RISK

The significant problems experienced by banks during the Global Financial Crisis have highlighted the critical importance of measuring and providing for credit risk (Allen & Powell, 2011). In this study respondents were asked if their institution used some of the most common methodologies for measuring and quantifying credit risk, namely; External Ratings, Financial Statement Analysis, Structural Model, Credit Metrics and VAR. The results were as shown in the table below.

<table>
<thead>
<tr>
<th>Methodology</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>External Ratings</td>
<td>0%</td>
</tr>
<tr>
<td>Financial Statement Analysis</td>
<td>100%</td>
</tr>
<tr>
<td>Structural Model</td>
<td>13%</td>
</tr>
<tr>
<td>Credit Metrics</td>
<td>13%</td>
</tr>
<tr>
<td>VAR</td>
<td>33%</td>
</tr>
</tbody>
</table>

Local financial institutions do not use external ratings to quantify credit risk due to lack of a credit rating agency in the country. The most common methodology for quantifying
credit risk was Financial Statement Analysis which was used by all the respondent financial institution. The method is much easier to apply although subject to manipulation as the models rely on data supplied by the borrowing institution (Allen & Powell, 2011). The widespread use of the financial statement analysis models could mean that credit risk level aggregate are being understated across most of the institutions were additional methodologies are not applied. The other methodologies are however, not widely used as the results showed: Structural Model (13%), Credit Metrics (13%) and Value at Risk (33%). Concerns were raised by respondent at the level of availability of data to apply some of the methodologies. Sabato (2005) points out the dangers of not being able to accurately predict potential loan default through unreliable credit measures. These results are also consistent with a study by Buchanan (2008), who highlights the dangers of poor risk modeling especially in financial institutions in developing countries.

4.2.4 CREDIT RISK MANAGEMENT FRAMEWORK

4.2.4.1 LOAN REVIEW FRAMEWORK

Responses from the participating risk managers from the participating institution indicate that all the institutions had systems in place for reviewing existing loans. However results showed that loan reviews were not always independent from loan origination functions as the chart below, which compares those institutions where the functions are independent (Yes) and those were the functions are not independent (No).
According to the results 60% of the respondent financial institutions had clearly separated functions of loan granting and loans review while for the remainder the functions were not independent. It is important to have independence between the two functions as a control tool so as to ensure that loans are adequately reviewed and that credit risk is adequately quantified for all credit assets in the bank’s portfolio (Greunung and Bratanovic, 2003).

4.2.4.2 LOAN REVIEW FREQUENCY

Figure 4.12: Frequency of Loans Review
Results showed that 53% of the financial institutions in the study reviewed credit assets continuously, 13% reviewed quarterly, 27% reviewed semiannually and lastly just 7% reviewed loan portfolios annually. With the dynamism of the current banking environment, regular loan portfolio reviews are necessary in order to identify worsening credit risk exposures (Falkena and Meijer, 1989). The responses in this study suggest that the review framework is insufficient in a number of financial institutions which put the whole financial system on an uneven keel.

4.2.4.3 MANAGING PROBLEM CREDIT ASSETS

Various points were raised by respondents on how they managed problem loans and also how problem loans were identified. The categorization of problem loans ranged from those loan assets that have been in arrears for three months to 12 months at which point the institution triggered measures put in place to manage such credit. Measures that emerged from the responses include the following:

- Calling in the whole outstanding amount
- Taking over assets pledged as collateral
- More active involvement in operations of defaulting clients
- Referral to top management in case of related party loans

It emerged that the measures that local banking institutions took are similar to international practice. It also emerged that there were issues with managing problem insider loans which also raises issues on the effects on individual bank stability which, through the systematic linkages in the banking sector, affect overall banking sector stability. This suggests that the management of problem loans, and in particular insider loans, may not be sufficient to avert another banking crisis in Zimbabwe through failures in a single banking institution. Haneef et al (2010) also identified the same problem within the Pakistani banking sector and its effect on overall risk management for the country’s banking sector.
4.2.5 CREDIT RISK CHALLENGES

4.2.5.1 CREDIT RISK AND BANKING SECTOR CRISIS

The Reserve Bank of Zimbabwe has always lambasted the banking sector for having caused the financial sector instabilities experienced in recent years. Risk managers were asked to what extent they thought poor credit risk management in the financial services sector contributed to the crisis. The results were as shown in the Figure below.

![Figure 4.13: Credit risk management and banking sector crisis](image)

A significant number of the respondents (53%) felt strongly that poor credit risk management contributed to recent banking sector instabilities in Zimbabwe. Only 13% of the respondents felt that the instabilities had other causes apart from poor credit risk management. The remainder felt that while credit risk management had a part to play in the instability, other factors were also at play and not poor credit risk management only. These results provide ample evidence that poor credit risk management was the main culprit for the financial crises of recent years (Bart et al, 2006). Combined with other factors, the cocktail proved fatal.
4.2.5.2 CENTRAL BANK AND BANKING SECTOR STABILITY

While the Reserve Bank of Zimbabwe has been on a crusade, blaming the players in the banking sector for the financial crises and resultant instabilities, risk managers felt that the central bank should shoulder some of the blame for the mess. The table below shows some of the issues that emerged that were of concern to respondents in the performance of the supervisory authority’s in credit risk management in Zimbabwe.

**Table 4.6: Culpability of Central Bank in Banking Sector Crisis**

<table>
<thead>
<tr>
<th>Issue</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inadequate guidelines</td>
<td>40%</td>
</tr>
<tr>
<td>Lack of proactiveness</td>
<td>47%</td>
</tr>
<tr>
<td>Poor supervisory standards</td>
<td>27%</td>
</tr>
<tr>
<td>Poor benchmarks</td>
<td>53%</td>
</tr>
<tr>
<td>Standards easy to circumvent</td>
<td>53%</td>
</tr>
<tr>
<td>Pressure to increase lending</td>
<td>80%</td>
</tr>
</tbody>
</table>

The majority of the respondents were concerned with the undue pressure from monetary authorities to increase lending to certain sectors, in particular agriculture. This resulted in loans that some of which may not have been made in the absence of such “directives”. The central bank may have been indirectly urging banks to make low scoring loan advances. Almost half of the respondents felt that there were inadequate guidelines issued by the central bank (40%) and that the monetary authorities were not proactive (47%) in managing sector wide credit risk. Poor supervisory standards of the regulatory authority were cited by 27% of the respondents and the ease to circumvent regulatory standards and poor benchmarking were both cited by 53% of the respondents. We conclude from these results that regulatory authorities could have done better to ensure more robust credit risk management within the sector and at the same time ensuring banking sector stability. Sabato (2009) also highlight similar concerns regarding the 2008 banking sector crisis and the role of the regulatory authorities in the crisis.
4.2.5.3 INSIDER LENDING AND BANKING SECTOR CRISIS

The subject of insider lending has featured prominently whenever the financial sector crisis that bedeviled Zimbabwe between 2003 and 2004 is discussed. The researcher asked respondents if they thought poor management of insider lending was to blame for the financial sector crisis and the responses showed that they felt strongly that this was the case (67%).

Figure 4.14: Contribution of Insider Loans to Bank Instability

A much smaller section of the respondents (13%) were not sure if poor insider loan management was to blame for the instabilities of recent years. One fifth of the respondents (20%) felt that poor insider loan management contributed to the crisis. These results highlight the concerns raised in Halling et al (2009) on the contribution of poorly performing insider loans to banking sector instability. These results further support the findings above that insider loans management remain a key issue of concern in credit risk management in Zimbabwe and a threat to financial services sector stability and is an area that needs attention of regulators.
4.2.5.4 IMPROVING CREDIT RISK IN ZIMBABWE

In order to improve credit risk management within the local financial services sector, respondents made a number of recommendations as summarized below:

- Strengthening the credit risk management profession in Zimbabwe,
- Improving governance systems so as to have sufficient check on insider loans,
- Strengthening the supervisory role of the central bank,
- Implementation of international best practices in Zimbabwe,
- Investment in latest technology in credit risk measurements and management

4.2.5.5 OTHER COMMENTS

While the risk managers were aware of the importance of their roles in managing credit risk in their institution some of them felt powerless especially as regards insider lending and management override by senior management. Some of the respondents felt that overall credit risk management is challenging in Zimbabwe due to lack of technology available in developed countries for credit risk measurements which rely on some data which is not available in the Zimbabwean market.

The lack of a credit rating bureau was cited as a concern by some respondents which they felt could make their tasks of assessing credit risks easier. The changeover to multicurrency environment in 2009 also introduced challenges due to lack of US$ historical data for the credit risk measurements which are largely financial statement analysis based. Some of the respondents also indicated that the banking sector has come a long way in improving credit risk management which should lead to a more stable banking sector going forwards.
4.3 CHAPTER SUMMARY

This chapter presented the data gathered from the questionnaires. Data was presented in a variety of ways; including charts, bar graphs and tables to enable it to be analysed and conclusions made. Responses gathered were considered sufficient to enable conclusions to be made. The next chapter will give the summary of the study, conclusions and recommendations.
CHAPTER 5

CONCLUSIONS AND RECOMMENDATIONS

5.1 INTRODUCTION

This chapter presents the conclusions that were drawn from the research findings. The chapter also outlines recommendations on how best banking institutions in Zimbabwe can improve their management of credit risk so as to preserve their safety, soundness and stability. A summary of research findings, conclusions drawn from research findings and recommendations on how best credit risk management frameworks for banks were developed.

5.2 SUMMARY OF RESEARCH FINDINGS

The following research findings are going to cover comments of the results of the study in relation to the research objectives clearly stating the extent to which they have been achieved.

5.2.1 SUFFICIENCY OF CREDIT RISK MANAGEMENT FRAMEWORKS IN THE BANKING SECTOR OF ZIMBABWE.

a. Findings

The study revealed that credit risk management frameworks that have been employed by the banking sector have not been sufficient to ensure stability in the financial sector as a whole. This is seen from the fact that some financial institutions did not have properly documented risk policies. Further some of the financial institutions had not adopted Enterprise Risk Management systems.

Key issues that also emerged from the study include the following:

- Available credit risk measurement methodologies are not being fully utilized in Zimbabwe with reliance placed on Financial statement analysis models,
Financial institutions are largely conscious of the requirements for credit risk management with the issue being addressed at Board level through the creation of Asset and Liabilities Committees and other committees with similar terms of reference. However, results show that there are still issues with regards to implementation,

While the majority of the financial institutions have documented risk frameworks there are some issues that are not adequately covered. These issues include the establishment of risk parameters and the role of technology in credit risk management,

External guidelines have not been fully implemented by a good number of financial institutions. These include Reserve Bank of Zimbabwe (RBZ) guidelines and those issues by international bodies like the Bank of International settlement (BIS). Some of the institutions are however at various stages of implementing the guidelines.

**b. Conclusion**

From the results of this study we can conclude that the credit risk management framework was not sufficient to ensure stability of the financial services sector as a whole. This assertion was supported by almost half (47%) of the respondents mainly risk managers who are the guardians of risk management portfolios in their respective institutions. The result is that risks were not being managed holistically as risks were being managed in a fragmented approach. It was important to establish linkages between risk categories and not managing each risk class separately. The study further revealed that credit risk management frameworks in the banking sector were not sufficient to ensure health loan book performance and general banking sector stability. It was revealed that majority of banks were operating without a comprehensive and proper loan administration systems whose core areas include separation of loan administration from the entire loan granting process, loans disbursement done with the approval of the Loan Management Committee and processed by a separate unit from those who deal with loan applications.
c. Recommendation

There is need for the banking sector as a whole to rethink risk management, in particular credit risk management. While the study reveals that most of the banking institutions have put in place systems to manage credit risk management, there is need to ensure full implementation and strengthening systems where deficiencies are identified. Supervisory authorities should work in conjunction with banking institutions to ensure that systems are sufficient to guarantee a stable financial services sector.

5.2.2 CREDIT RISK MANAGEMENT AND BANKING SECTOR CRISIS IN ZIMBABWE.

a. Findings

The study also sought to establish the extent to which poor credit risk management practices contributed to instabilities experienced by the local banking sector in recent years. The results of the study support the assertion that poor risk management practices contributed significantly to the instability. Only 13% of the respondents thought poor risk management practices did not have an impact on the banking sector crisis. The majority of the respondents felt positive that the impact was significant. Although there were a lot of other factors that were behind banking sector instability during the period under study, the chief among them was poor credit risk management. Some of the ways in which poor corporate governance manifested itself (such as insider lending) in fact reflected poor credit risk management frameworks in the banking sector.

b. Conclusion

In conclusion, the results also reflect deficiencies in loans review systems and inadequate credit risk measurement left the banks and the sector as a whole exposed. Poor management of existing loan exposures also left the sector exposed as the deficiencies in credit risk management manifested. Other factors that fuelled banking sector problems included lack of proper supervisory framework, lack of proper regulatory framework and poor corporate governance. The central bank should also take some blame for the deficiencies found in credit risk management in Zimbabwe as the bank seems to have been lax in its supervisory role with risk managers accusing the
RBZ of various issues; including putting pressure on banks to increase lending, inadequate guidelines and lack of pro-activeness.

c. Recommendation
There is urgent need for regulatory authorities to put in place measures to ensure that credit risk management systems in various financial institutions are strengthened in order to ensure a robust financial services sector. Supervision of banks needs to be strengthened to ensure that available credit risk management systems are fully implemented for a healthy financial system.

5.2.3 INSIDER LOANS AND CREDIT RISK MANAGEMENT

a. Findings
Insider loans are still a problem area for credit risk management in Zimbabwe. Even the majority of risk managers (67%) involved in this study concurred that poor management of insider loans were to blame for the banking sector instabilities. The other problem that was endemic was the overriding of controls in the granting of loans to related parties. Most of the insider loans were also poorly performing or non-performing which compounded the problem. The conclusion that emerged is that management override controls put in place to manage credit risk was a major issue when it came to insider loans. This was attributed to a large extent with poor credit risk structure.

b. Conclusion
Insider loans do not only represent a threat to bank profitability but are a threat to sector wide credit risk management. Despite the issue being highlighted and flagged during the financial sector crisis of 2003/2004 insider loan still present challenges and are a source of instability in the banking sector in Zimbabwe.

c. Recommendation
The management of insider loans is a problem area in the local banking sector and it appears governance systems within banks are not sufficient to manage the situation. The regulatory authorities should put in place measures to ensure disclosure of related
party loans and ensure that such loans are monitored externally by regulatory authorities. A new framework for monitoring insider loan performance should be incorporated into the supervision system of the central bank and in particular large insider loans should be monitored offsite.

5.2.4 CREDIT RISK MANAGEMENT CHALLENGES IN ZIMBABWE

a. Finding
The financial services sector in Zimbabwe still faces challenges with credit risk management which could negate efforts to ensure banking sector stability. These issues include the lack of a credit bureau, strengthening the supervisory role of the RBZ. Insider lending also appears to be still a challenge and needs to be addressed holistically by strengthening governance structures in the banking sector in Zimbabwe. Responses from the study also reveal that some of the challenges in credit management in Zimbabwe financial services sector are to do with the availability of requisite skills; with the sector reeling from flight of skills to the Diaspora for reasons that are well documented.

b. Conclusion
Several factors are affecting credit risk management in Zimbabwe, some of these challenges are external to the banking institutions involved. The environment also acts to make sound credit risk management difficult.

c. Recommendation
The supervisory authorities should carry out a thorough research and come up with a list of all the challenges with credit risk management in Zimbabwe so that the problems can be addressed holistically. While it appears that risk managers have an understanding of what is required of them as regards credit risk management within their institutions, it appears that commitment at the top level may be missing.
5.2.5 GENERAL CONCLUSION
A number of conclusions can be drawn with regard to the extent to which research findings of this study confirm the objectives of this study which was primarily to establish a link between credit risk management and the banking sector instabilities that were experienced in Zimbabwe during the past decade. The research findings to a larger extent confirmed such a link. The issue of high non performing loans that has been highlighted by the study; and in particular poorly performing insider loans. Prudential lending practices are inadequate in the financial services sector, a situation which is worsened by poor capitalisation levels of financial services sector player. This situation is a recipe for disaster if not addressed in time.

The research findings by Pikoz and Eeyonda (1987) to a greater extent resembles the researcher’s findings in that they both revealed that sound credit risk management involves establishing a credit risk philosophy, policies and procedures for prudently managing the risk-reward relationship across a variety of dimensions, such as asset quality, concentration, maturity, currency, collateral security or property and type of credit facility. They both further revealed that a comprehensive credit risk management policy was critical to the successful implementation of the overall risk management function.

5.3 GENERAL RECOMMENDATIONS
In light of all the aforesaid, general recommendations can now be made to policy formulators of credit risk management in Zimbabwe. These recommendations are based on the findings of research. These are however suggestions of solutions to practical problems and not a panacea.

5.3.1 CREDIT RISK MANAGEMENT FRAMEWORK
Banks should come up with, and document, credit risk frameworks that should precisely guide the bank in all aspects related to credit risk management. Banking institutions should also come up with plans for implementing Enterprise Risk Management instead of managing risks in a fragmented manner. The framework should clearly define risks
and set out parameters for the bank’s risk appetite. It appeared to the researcher that current documentation for credit risk in the financial institution is lacking in some important details which does not allow risks to be managed holistically. Key issues, as a minimum, to be addressed include:

- The policy document must also include a list of economic sectors that the bank will engage in and those in which it is not willing to engage. This will be decided after a thorough risk-return analysis of each economic sector.
- Establishing authority levels and assigning responsibilities for managing credit risk in the bank
- Establishing linkages with other risk classes and putting in place measures to manage systematic risks
- Spelling out the role of technology in managing credit risk and establishing a system for ongoing management of credit exposures,
- Establish parameters on training on credit risk management to key officers who commit the bank to credit risk and those who are involved in day to day monitoring of credit risks.
- Establishing a sound framework of managing credit risk should be the first priority of banking institutions so that the bank does not assume more risk than it can manage.

This should lead to a more stable financial services sector capable of managing any shocks.

5.3.2 CREDIT RISK MANAGEMENT MEASUREMENT
Financial institutions are currently not utilizing all available credit risk measurement tools with reliance being placed of financial statement analysis models which however rely too much on financial data supplied by the borrowing clients. It is important to establish robust credit risk measures so as to ensure that risks can be easily monitored through establishing trigger mechanism and flagging systems for problem loans.

5.3.3 MONITORING LOAN PORTFOLIOS
Financial institutions should strengthen their loan monitoring systems and review loan portfolios on an ongoing basis so that potential problem loans are identified and
appropriate measures taken before they deteriorate. Banks should keep and update on an ongoing basis the profiles of all economic sectors in which they have exposures. The profile of each economic sector and individual borrower provides a very important input into the credit risk management framework. The loan portfolio monitoring policy must provide a sufficient system to detect what could potentially go wrong with individual loans in the whole loan portfolio if the operational environment of the borrower changes drastically. The results of this analysis should then be factored into the overall assessment of the sufficiency of credit risk management framework in the banking sector.

5.3.4 ESTABLISHING CREDIT BUREAU
Banks should come together and the central bank should take a lead in establishing a credit bureau to make it easier for financial institutions to establish credit risks attaching to any potential borrower. This should allow for information to be available centrally which should ensure some form of uniformity at standards between financial institutions. Such an institution should be the beginning of a credit rating system in the country which should ensure higher levels of banking sector stability in the longer term.

5.3.5 GOVERNANCE SYSTEMS
Governance systems and structures need to be strengthened in the financial services sector. This study has uncovered some serious deficiencies in governance structures in the banks especially in the area of insider loans and setting up of systems of credit risk management. There is a strong need for leadership in setting up a strong culture of credit risk management across the whole banking sector to ensure financial services sector stability.

5.3.6 INFORMATION TECHNOLOGY IN CREDIT RISK MANAGEMENT
Financial institutions should invest in information technology to manage credit risk. IT reduces the need for human interventions and emotions and it is much easier to aggregate risk. Modern IT systems are capable to inputting qualitative as well as quantitative factors. This should ensure a more stable banking sector in Zimbabwe going forwards.
5.4 CONCLUSION

The dynamic environment under which world financial institutions now operate requires that they should have sound credit risk management policies and procedures, which are sensitive and responsive to these changes. The changes that the financial institutions are currently facing include globalization, consolidation and disintermediation. These changes place new and unique pressures on the financial system’s credit risk management infrastructure. In any bank, the corporate goals and credit culture are closely linked and an effective CRM framework requires three distinct building blocks which are strategy and policy, organization and operations/ systems.

5.5 SUGGESTION FOR FUTURE RESEARCH

A theme that ran through much of the responses in this study was that of the role of top management and the board including their responsibility for certain deficiencies. Further research should be carried on analysis of corporate governance and its impact on the development of a sufficient credit risk management framework for the banking sector in Zimbabwe. Several studies have been carried out examining the link between financial crisis and corporate governance but none has examined the place of credit risk management in the relationship. Such a research is important as it should help understand the mechanisms to ensure banking sector stability and should hopefully help to prevent financial crisis in the future or at least minimize their impact.
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APPENDIX I: LETTER TO INTERVIEWEE

Stand Number 19007
Damofalls Park
Ruwa

19 June 2012

Dear Sir/ Madam

I am currently carrying out an empirical study entitled: “An Investigation of the Sufficiency of Credit Risk Management in the Banking Sector: A Case of Zimbabwe” in partial fulfillment of the requirements of the Master in Business Administration Degree at the University of Zimbabwe (UZ). The study aims to explore the sufficiency of credit risk management practices in maintaining financial sector stability.

Could you kindly provide information by completing this questionnaire to the best of your knowledge? Your responses will be treated as confidential and will not be used for purposes other than those intended for this research.

For any further information, do not hesitate to contact the researcher on the above contact details or email herrisonmatsongoni@yahoo.com.

Thank you in anticipation

Herrison Matsongoni

Student Number R9916476
Mobile: 0773 656 268
APPENDIX II: QUESTIONNAIRE

MASTER OF BUSINESS ADMINISTRATION

RESEARCH QUESTIONNAIRE FOR RISK MANAGERS

“AN INVESTIGATION OF THE SUFFICIENCY OF CREDIT RISK MANAGEMENT AND BANKING SECTOR STABILITY IN ZIMBABWE”
(2000 – 2011)

Questionnaire Instructions

No identifiable individual responses collected in this questionnaire will be disclosed in the survey report.

To complete the questionnaire, you may seek views from colleagues in your organisation.

This questionnaire should take approximately thirty (45) minutes to complete.

A number of different approaches are used in the questions, as follows:
QUESTIONS

[USED BY RESEARCHER CONDUCTING THE INTERVIEW]  

SECTION A: GENERAL INFORMATION

Interviewer: ____________________________

Interview Date: __________________________

ORGANIZATION INFORMATION

Name of Person Completing Survey: ____________________________

Title of Person Completing Survey: ____________________________

Qualification: ____________________________

Name of the institution: ____________________________

Position of respondent in the institution: ____________________________

Age of respondent: ____________________________

Telephone Number: ____________________________

If Non Management: Terminate the interview
## CREDIT RISK MANAGEMENT FRAMEWORK

1. Does your institution have a properly documented Credit Risk Management Framework?
   - [ ] Yes
   - [ ] No

2. Does your institution have a properly documented Risk Policy document?
   - [ ] Yes
   - [ ] No

3. Does your institution have a properly constituted Asset and Liabilities Committee at Board level?
   - [ ] Yes
   - [ ] No

4. Does the institution have an Enterprise Risk Management framework to holistically manage all the risk that the institution faces?
   - [ ] Yes
   - [ ] No

5. Briefly highlight the major issues addressed in your institution’s Credit Risk Management framework?
   - .................................................................................................................................
   - .................................................................................................................................
   - .................................................................................................................................

6. In your own opinion, do you think the credit risk management frameworks in the banking sector is sufficient? Explain your opinion citing reasons for your view.
   - .................................................................................................................................
   - .................................................................................................................................
   - .................................................................................................................................

7. Does your Board of Directors have a role to play in ensuring the sufficiency of the credit risk management framework? Explain
   - .................................................................................................................................
   - .................................................................................................................................

8. Do you have a specific committee responsible for ensuring a proper credit risk management framework on an ongoing basis? Explain how it performs its task.
   - .................................................................................................................................
   - .................................................................................................................................
9. Who sets the overall tone and culture of credit risk management in your financial institution?

10. How regularly does your institution review its credit risk management framework?

11. What external guidelines and international best practices on credit risk management have your institution adopted for use by your institution?

LOAN GRANTING & MONITORING PROCESS.

12. Do you have a proper loan administration system? Briefly describe how your loan administration system works and how does it work in minimizing credit risk?

13. Briefly explain the extent to which your system for monitoring and managing the condition of both individual loans and portfolio loans reduces overall credit risk. Do you think it is sufficient enough to ensure stability in the banking sector? Explain.

14. Does your provision for bad debts influenced in any way by non-performing loans? In your own opinion, how does non-performing loans influence banking sector stability?

16. Briefly outline the provisions of your loan granting criteria. How do you think the loan granting criteria impacts on the quality of loans in your portfolio and general stability of the banking sector as a whole?

17. Do you have a clearly established process for approving new credits as well as the extension of existing loans?

18. Briefly explain the process you use for approving new loans as well as extending existing loans?

19. Does your bank have a specific policy governing the granting of loans to insiders or connected parties? Also highlight the provisions of such a policy.

20. What tools do you use for monitoring credit risk in your organisation?

21. What tools do you use to quantify credit risk in the organisation?

22. How regularly do you review counterparty limits and who is responsible for this review?

23. Do you have a formal reporting framework for credit risk in your financial institution?
CREDIT RISK MANAGEMENT FRAMEWORK

24. Is there independence of those responsible for loan reviews from those who issue loans?

Yes  No

25. How frequently do you review the quality of your loan portfolio?

- Annually
- Semi-annually
- Quarterly
- On a continuous basis
- Other (Specify)

26. To what extent do your loan exposures conform to prudential standards and internal limits?

………………………………………………………………………………………………………………
………………………………………………………………………………………………………………
………………………………………………………………………………………………………………

27. How do you manage problem loans?

………………………………………………………………………………………………………………
………………………………………………………………………………………………………………
………………………………………………………………………………………………………………

CREDIT RISK MANAGEMENT CHALLENGES IN ZIMBABWE.

28. To what extent do you think poor credit risk management contributed to the crisis experienced in Zimbabwe’s banking sector in recent years?

- Significantly
- Moderately
- No significant impact

Comment………………………………………………………………………………………………………………
………………………………………………………………………………………………………………
29. How do you assess the role of the Reserve Bank in promoting adequate loan risk management in Zimbabwean banking institutions?
   Effective [ ]
   Ineffective [ ]

30. Is enough being done by the supervisory authority in promoting effective credit risk management in Zimbabwean banks? If not, what do you think needs to be done by the supervisory authority?

31. Do you think poor risk management practices were responsible for the banking sector crisis that Zimbabwe witnessed between 2003 and 2009?

32. How significant do you think was the contribution of poor management of insider lending to banking sector failure during the 2003 to 2005 period?

33. What do you think should be done to improve credit risk management in Zimbabwean financial institutions?

34. Any other comments?

End of questionnaire

Thank you for taking your time to fill the questionnaire

May God Bless You
### APPENDIX III: TIME SCALE

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<tr>
<th>ACTIVITY</th>
<th>PERIOD</th>
<th>Responsible</th>
</tr>
</thead>
<tbody>
<tr>
<td>Review of literature</td>
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</tr>
<tr>
<td>Draft Literature Review</td>
<td>Apr/ May</td>
<td>Self</td>
</tr>
<tr>
<td>Review research methods literature and finalise on research strategy.</td>
<td>Jun/ July</td>
<td>Self</td>
</tr>
<tr>
<td>Arrange for the access to organisations with relevant data.</td>
<td></td>
<td>R/Assistant</td>
</tr>
<tr>
<td>Compile questionnaire</td>
<td></td>
<td>Self</td>
</tr>
<tr>
<td>Send and collect questionnaires from companies</td>
<td></td>
<td>R/Assistant</td>
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<tr>
<td>Process data</td>
<td></td>
<td>Self</td>
</tr>
<tr>
<td>Dissertation writing and production of first draft</td>
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<tr>
<td>Production of final dissertation</td>
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## APPENDIX IV: MONETARY BUDGET

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</thead>
<tbody>
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<td>Bond Paper</td>
<td>3 Rims (1500 sheets)</td>
<td>5.00</td>
</tr>
<tr>
<td>Typing and Printing</td>
<td></td>
<td>30.00</td>
</tr>
<tr>
<td>Internet Browsing</td>
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<tr>
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<tr>
<td><strong>TOTAL</strong></td>
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<td><strong>295.00</strong></td>
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