
Baven Svunurai Majattha (R962402J)

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Graduate School of Management
University of Zimbabwe

Supervisor: Dr. N. Kaseke
DEDICATION

To my family
DECLARATION

I, Baven Svunurai Majattha, 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 my comments included in the body of the report, and that it has not been submitted in part or full for any other degree to any other university.

______________________________                                            ______________________
Signature                                                                                         Date
ACKNOWLEDGEMENTS

First and foremost, I thank God the Almighty for the guidance and the patience that enabled me to complete this work.

I would like to show my appreciation to my supervisor Dr Nyasha Kaseke for the advice and direction throughout the study. His warm reception, guidance and comments were indeed of great value to this work.

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God bless you all!
ABSTRACT

The downturn in Zimbabwe’s economic performance in the late 1990s saw a surge in microfinance activities to provide funding to start or grow informal income generating activities and other micro and small sized enterprises as unemployment and poverty levels rose. However, the mention of microfinance in Zimbabwe is synonymous with greediness as MFI practitioners have historically and presently, been charging very high prices on their loan products. This study therefore sought to establish factors driving these supposedly high loan prices by MFIs by focusing on a portfolio of eighteen (18) institutions funded by the ZMWF. Furthermore and most importantly, it sought to establish the relationship between these loan prices and the respective MFIs’ portfolio performances.

The study found out that most MFIs under the ZMWF portfolio do not have loan pricing frameworks but showed that the prices that they charge are largely driven by the need to cover operating and administration costs. This is in addition to the need to also cover cost of funds that they use to grow their loan books and the need for profitability and sustainability to ensure their going concern status. Thus, factors that drive such loan prices are largely internal to the MFIs relative to the role played by external factors such as client credit ratings, regulatory pressure and political risk. The study also showed that MFI loan prices have a positive relationship with portfolio performance indicators such as PaR, write off and arrears ratios meaning that the higher the loan price, the higher the ratios relating to these indicators partly confirming the prevailing high ratios on these indicators in Zimbabwe. On the other hand, the research established that loan prices have a negative relationship with portfolio performance indicators such as collection rate, number of clients served and loan book sizes meaning that an increase in loan prices leads to a decrease in the respective ratios as clients fail to repay loans, with fewer clients coming to borrow hence leading to reduced loan book sizes. The study concluded by coming up with recommendations that hinge upon effective operating cost management by MFIs, innovativeness as well as capacity building and technical support to MFIs to promote operational efficiencies with the aim of pushing loan prices to reasonable levels.
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LIST OF ACRONYMS OR ABBREVIATIONS

CGAP  - Consultative Group to Assist Poverty
CPPs  - Client Protection Principles
CRBs  - Credit Reference Bureaus
GoZ   - Government of Zimbabwe
MFI   - Microfinance Institution
MIX   - Microfinance Information Exchange
MPC   - Monetary Policy Committee
MSME  - Micro, Small and Medium Enterprises
MSMECD - Ministry of Small to Medium Enterprises and Cooperative Development
NMP   - National Microfinance Policy
NPLs  - Non Performing Loans
OSS   - Operational-Self Sufficiency
PAR   - Portfolio at Risk
RBZ   - Reserve Bank of Zimbabwe
ROE   - Return on Equity
SACCO - Savings and Credit Cooperative Society
SME   - Small and Medium Enterprises
ZAMFI - Zimbabwe Association of Microfinance Institutions
ZMWF  - Zimbabwe Microfinance Wholesale Facility (Private) Limited
CHAPTER 1
INTRODUCTION

1.1 Introduction
Informal income generating and small enterprise activities started to proliferate in the late 1990s when Zimbabwe’s economic performance started to experience a downturn. This came on the backdrop of a lot of companies downsizing with some even taking the most drastic route of closing down operations, resulting in a surge in the number of the unemployed on the streets. Resultantly, microfinance activities increased as demand for small loans also increased, with many people starting to seek capital to either start or grow own enterprises. Funds were also required to meet basic needs such as low income housing for shelter, education for their children, medical and health related expenses as well as acquiring agricultural inputs. With microfinance activities tending to thrive in developing countries where levels of poverty and unemployment are very high, Zimbabwe witnessed an increase in the number of microfinance institutions operating in the country and at one point topped 1 660 in 2003 (Zimbabwe Association of Microfinance Institutions, 2014).

In Zimbabwe, the mention of microfinance conjures images of MFI practitioners who behave like predators out to squeeze the hard earned cash out of the bottom of the pyramid beneficiaries, because of high prices of their loan products. Since the adoption of the multicurrency regime, the media has been reporting on how policy makers and consumers complain of the high pricing structures of loan products by MFIs with The Herald of 11 December 2012 carrying an article entitled “Government bemoans high microfinance interest rates”.

Whilst factors feeding into the determination of loan prices (sometimes referred to as interest rates in this paper) are generally available in various literature pieces, the purpose of this study was to determine whether microfinance institutions (MFIs) in the Zimbabwean context had any systematic way of arriving at particular pricing levels for their loan products or what they charge their clients were mere figures plucked from nowhere. Further the study sought to establish whether such pricing levels had an effect on their portfolio performance.
1.2 Background

With the continued deterioration of the economic performance, the supply side of microfinance funding started to dwindle with many MFIs closing down by end of 2008. Very few with strong balance sheets and wealthy shareholders survived beyond 2008 as hyperinflation which started in January 2006 took a toll on them. In response to this economic meltdown, and in addition to developments on the political front which culminated in the formation of the Government of National Unity (GNU), February 2009 saw Zimbabwe introducing the multicurrency system to replace the local currency (the Zimbabwe Dollar) as a way to create stability in the economy. Ideally, the multicurrency system comprises use of a basket of the world and region’s major currencies such as the United States of America dollar, the British Pound Sterling, the South African Rand, and the Botswana Pula as official currencies for all business transactions. On the backdrop of hyperinflation and the changeover to multicurrency regime, balance sheets of many MFIs were wiped out with some of the institutions resorting to embarking on new capital raising initiatives to fund the resuscitation of their operations.

It must also be noted that the introduction of the multicurrency era in Zimbabwe coincided with severe liquidity challenges across the entire economy as the local monetary authorities no longer wield any influence on money supply activities into the economy. To compound this challenge, there was also massive skills flight of experienced personnel in the sector to other global regions. With the Zimbabwean based MFIs having to literally start their operations on new slates in 2009, the sector is still very fresh and has a lot to learn from its regional peers especially in Eastern and Western Africa, which have traditionally been hubs of microfinance activities on the African continent in aspects such as innovations, new product developments as well as ability and speed to leverage on mobile technology among other developments.

1.2.1 Trend of MFI interest rates

The researcher notes that there have not been any official figures on how much Zimbabwean MFIs charge their clients from the available literature and by the same token no official figures are available to show the trend of such pricing structures over time. However indications are that some MFIs are charging rates as high as 35% per month (420% if
Considering that the multicurrency system helped to stabilise prices, charging interest rates as high as 420% per annum looks very unfair to end beneficiaries. The absence of such official data on this warranted an in-depth research into the area to establish dynamics behind such pricing of loan products.

The Reserve Bank of Zimbabwe (RBZ), which is the registrar and regulator of MFIs, has not been publishing such important information to consumers in its regular quarterly microfinance reports. However, it has been largely publishing interest rates pertaining to the banking sector in its regular monetary policy statements. The Monetary Policy Committee (MPC) of the RBZ (2014c) released a policy statement on the framework that banks were supposed to follow in establishing both deposit and lending interest rates seeing that the sector was also charging high interest rates on the borrowing public relative to what it was offering for deposits from the same market. The statement noted that as at 31 December 2013, bank lending rates ranged from 6% to 35% per annum which the committee considered high. Microfinance interest rates are traditionally higher than those obtaining in the banking sector with some reaching unprecedented levels of 35% per month on loans transacted using major international and regional currencies which are generally regarded as stable. However as a guide, the MPC statement recommended an indicative yield curve framework that was based on the Treasury Bills rate as shown in Table 1.1 below:

<table>
<thead>
<tr>
<th>Period</th>
<th>3 months</th>
<th>6 months</th>
<th>9 months</th>
<th>1 year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interest rate</td>
<td>6.6% per annum</td>
<td>7.2% per annum</td>
<td>7.8% per annum</td>
<td>8% per annum</td>
</tr>
</tbody>
</table>

Source: RBZ (2014c) MPC Statement of January 2014

Therefore the absence of such critical information for the clients justified the need for the researcher to undertake this study as to how MFIs determine their interest rate levels.

1.2.2 Regulation of MFIs in Zimbabwe

All credit only MFIs and microfinance banks are licenced, regulated and supervised by the RBZ. Another class of MFIs, called Savings and Credit Cooperative Societies (SACCOs) are
licenced, regulated and supervised by the Ministry of Small to Medium Enterprises and Cooperative Development (MSMECD). The year 2013 saw an end to era of a fragmented legislative framework for the microfinance sector. Notable pieces of legislation that were generally used to govern the sector include Money Lending and Rates of Interest Act (Chapter 14:14), Prescribed Rates of Interest Act and Statutory Instrument Number 126 of 1993. Seeing that a fragmented legislative framework was not conducive for the proper regulation of the sector, MFI’s through its association, ZAMFI advocated for the establishment of a singular legislative framework which was eventually passed into law on 30 August 2013 as the Microfinance Act Number 3 of 2013 (Chapter 24:29). Section 15 (subsection 2 b and c) of the new Act complies with the Client Protection Principles (CPPs) of The Smart Campaign (2010) which seek to improve MFI services delivery by being transparent on the information that MFI’s have to display to the borrowing public. Thus section 15 (subsection 2 b and c) requires MFI’s to display information pertaining to the annual interest rates and other charges MFI’s levy on their loans and advances.

In Zimbabwe, loan prices are currently not capped but regulatory authorities just encourage lending institutions to practice restraint when coming up with loan prices. Thus the authorities encourage prices that are justifiable to ensure sanity prevails in the sector.

### 1.2.3 Performance of the microfinance sector

Table 1.2 summarises key performance indicators for the sector over a one year period ended 30 June 2014.

<table>
<thead>
<tr>
<th>Indicator</th>
<th>30 June 2014</th>
<th>31 March 2014</th>
<th>31 December 2013</th>
<th>30 September 2013</th>
<th>30 June 2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Loans (US$’000)</td>
<td>177.76</td>
<td>170.00</td>
<td>164.20</td>
<td>164.51</td>
<td>97.01</td>
</tr>
<tr>
<td>Total Assets (US$’000)</td>
<td>214.00</td>
<td>193.87</td>
<td>185.73</td>
<td>206.79</td>
<td>131.96</td>
</tr>
<tr>
<td>Portfolio at Risk (PaR&gt;30 days)</td>
<td>14.67%</td>
<td>27.14%</td>
<td>16.03%</td>
<td>21.60%</td>
<td>33.78%</td>
</tr>
<tr>
<td>Number of Clients</td>
<td>190,819</td>
<td>188,990</td>
<td>150,188</td>
<td>157,512</td>
<td>118,515</td>
</tr>
</tbody>
</table>

**Source:** RBZ (2014b)

The period between 2009 and 2014 saw a lot of challenges in the sector chief among them being tight liquidity conditions affecting capital supply to fund MFI operations. This has
largely been blamed for the high cost of funds in the market which consequently leads to an increased burden on the shoulders of end borrowers. Due to this illiquidity, compounded by high political and country specific risks, the economy as a whole has been lacking long term funding which is key to the development of the sector through MFI sustainability and stability. MFIs have also been grappling with high levels of non-performing loans (NPLs) leading to the de-capitalisation of MFI loan books. The RBZ (2014d) noted that the level of NPLs in the financial services sector was 16% as at 31 December 2014. This has the effect of de-capitalising MFI loan books as they will have to eat into their capital to compensate for the uncollected funds. There has also been an apparent delay by the regulatory authorities in the operationalization of the Credit Reference Bureaus (CRBs) which in itself breeds loan default due to high levels of multi borrowing and over indebtedness. MFIs have also been employing unsustainable business models due to lack of innovation on the part of MFIs as most have been relying on the traditional vanilla lending models which have the effect of promoting low collection rates.

Despite the challenges mentioned above, the sector however exhibits signs of opportunities which MFIs can explore to grow and become sustainable. Firstly, the high mobile phone penetration levels and increasing internet connectivity lead to the development of new technologically driven microfinance and financial inclusion products that have the effect of reducing loan pricing due to increased and improved operational efficiencies. Secondly, product innovation and new lending models by MFIs, for instance, value chain financing specifically in the agricultural sector saw the Zimbabwe Microfinance Wholesale Facility (Private) Limited (ZMWF) financing commodities like the cassava value chain with Quest Financial Services (Private) Limited in addition to dairy farming financing through MicroKing Finance (Private) Limited (The Financial Gazette, 2014). Thirdly and lastly, the stability which the use of the multicurrency system promotes means that MFIs are at least able to plan for the short to medium term with the long term future however remaining uncertain.
1.2.4 The Zimbabwe Microfinance Wholesale Facility (Private) Limited (ZMWF)

The liquidity challenges that have been prevailing in the economy since the adoption of the multicurrency system seriously affected access to on-lending capital by Zimbabwean MFIs. Realising these challenges, the Zimbabwe Association of Microfinance Institutions (ZAMFI) in conjunction with four international development agencies namely HumanistischInstituutvoorOntwikkelingssamenwerking (HIVOS), Department of International Development (DFID), the Danish International Development Agency (DANIDA) and the Deutsche Gesellschaft fur InternationaleZusammenarbeit (GIZ) put their heads together to work on establishing a national apex funding body to improve the liquidity positions of all enterprise development oriented MFIs in the country. Although efforts to establish this body started in 2007 (before the multicurrency system), it gained traction in the year 2009 consequently leading to the formation of the Zimbabwe Microfinance Wholesale Facility (Private) Limited (hereinafter referred to as ZMWF) in the year 2011. The key mandate of this organisation is the provision of wholesale funds in the form of very concessionary loans to MFIs that are into microenterprise lending. Key focus areas for the deployment of its funds include rural based microenterprises mostly run by women and the youths. Its objective is to reduce poverty and create employment through provision of financial services through MFIs as intermediaries.

With a lean organisational structure of six permanent staff members, a fully constituted Board of Directors and a Board of Trustees at the top, the organisation is based in Harare but has funded projects in all the provinces of the country reached out through the MFIs that it is partnering. The Daily News of 19 September 2014 reported that seed capital of around $5 million was invested in ZMWF with loans worth $5.5 million having already been disbursed to fifteen MFI partners by 31 August 2014 ultimately benefiting 15 923 micro entrepreneurs. Loans are being wholesaled to MFIs at interest rates ranging from 8% to 13% per annum which is relatively low if compared to peers in the entire financial services sector. The objective of these low interest rates is cascaded to end beneficiaries (micro enterprise promoters) with the ultimate goal being to ensure sustainability of their enterprises.

Against this background of partnering MFIs that are deemed to be practising “real micro financing”, this research focused on a study of MFIs that are funded by ZMWF.
1.3 Research problem

The CPPs of The Smart Campaign (2010) seek to help and improve MFI services delivery at a global level, to the economically active poor in a manner that is helpful to their tiny enterprises. This is the reason why in February 2010, the Smart Campaign amended one of its principles on “transparency pricing” to “Transparency and Responsible Pricing” wherein it is enshrined that pricing, terms and conditions of financial products (including interest charges, insurance premiums and all fees) must be transparent and adequately disclosed to clients in a manner that they understand (The Smart Campaign, 2010). By responsible pricing, The Smart Campaign was referring to setting of pricing terms and conditions that are affordable to clients and sustainable to MFIs.

In Zimbabwe, both prior to and after the introduction of the multicurrency regime, but especially after the latter period, the issue of loan pricing by financial intermediaries has always been topical. In its Quarterly Microfinance Industry Report as at 31 March 2014, the RBZ cited high interest rates charged by MFIs as having “precipitated a high level of high indebtedness among the microfinance clients which has the undesirable effect of negating the financial inclusion objective of microfinance.” Researches done elsewhere in the world show that, for microfinance to be effective in its objective as a poverty fighting tool, reasonable pricing has to be levied on all its related products. Helms (2004) stated that high interest rates by MFIs have tended to attract the policy makers’ attention. The main question that has been asked in several jurisdictions has been why MFIs that seek to help the poor charge very high rates to the same constituency that they seek to assist. To better understand this and to fulfil the goal of The Smart Campaign of Transparent and Responsible Pricing, the researcher undertook this study focusing on MFIs partnering the ZMWF to reach out to the poor in both urban and rural Zimbabwe.

1.4 Research objectives

The objectives of the study were as follows:

1.4.1 To understand factors that determine pricing of loan products offered by MFIs operating in Zimbabwe;
1.4.2 To establish the existence and use of a structured loan pricing framework by MFIs in Zimbabwe;

1.4.3 To establish the impact of the partnership between ZMWF and MFIs on pricing of their loan products; and

1.4.4 To ascertain the relationship between interest rates (pricing) and portfolio performances of MFIs in Zimbabwe.

1.5 Research questions
The research questions were as follows:

1.5.1 What are the key determinants of loan pricing by MFIs operating in Zimbabwe?

1.5.2 Do MFIs in Zimbabwe use a structured loan pricing framework?

1.5.3 Does the partnership between ZMWF and the MFIs it is funding have an impact on the MFIs’ loan pricing?

1.5.4 What form of relationship exists between MFI loan pricing and loan portfolio performance?

1.6 Hypothesis or Proposition
The study was premised on the following hypothesis:

**H0:** Microfinance loan pricing is driven by a set of factors (cost of funds, operating costs, need for profits, political risk, client ratings and regulatory pressure) and in turn affects MFIs’ portfolio performances.

**H1:** Microfinance loan pricing is not driven by a set of factors (cost of funds, operating costs, need for profits, political risk, client ratings and regulatory pressure) and does not affect MFIs’ portfolio performance.

Microfinance portfolio performance indicators which were tested in the study relate to those recommended by the Consultative Group to Assist the Poor (CGAP) and include outreach levels (number of clients served and loan book size), portfolio at risk (PaR), collection rate, arrears rate, write off ratio and external factors like regulatory pressure, political risk and client credit ratings (Rosenberg, 2009).
The null hypothesis was tested using correlation analysis – which provides a measure between the two independent variables of loan pricing levels and portfolio performance.

1.7 Justification of research
Given the background information above, this study was necessary as it sought to determine factors which contribute to the pricing of loan products by MFI players in Zimbabwe. With the outcry from many stakeholders related to the supposedly high rates that these institutions charge, the research was necessary as it sought to critically look into how such interest rates are arrived at. As such the result of embarking on this study was to come up with possible solutions on optimum pricing levels for loan products offered by the Zimbabwean MFIs. In the interests of the client, as enshrined in the CPPs under its ‘transparency and responsible’ pricing banner, the end beneficiaries have every right to know what constitute the charges that they pay.

To end beneficiaries, the research purpose was meant to make them judge for themselves whether MFI players are justified in charging the current pricing levels since their concern is a price that ensures viability and continued sustainability of their own income generating projects. In this regard, it is critical that micro enterprises retain enough cash resources internally for ploughing back for continued growth. This can only be achieved by avoiding paying extortionate interest rates on funds from MFIs. On the other hand, the rates have to be such that MFIs themselves continue to exist as going concerns.

The research therefore sought to dig deeper into the mystery surrounding the pricing policies of these MFIs with the hope that it will benefit both the MFI’s loan portfolio performances as well as leading to the upliftment of the poor people who are driving the micro enterprises that now employ more than 2.4 million people (FinScope, 2012).

1.8 Scope of research
This research was geographically conducted in the microfinance sector in Zimbabwe on all the eighteen (18) MFIs that were partnering the ZMWF as at 31 December 2014 in its outreach programmes to both the urban and rural areas of the country. The research went further to establish the effects of the prices that these institutions charge on their respective portfolio performances. In terms of time, the research covered the period from 2009 to 2014,
which is the period that Zimbabwe introduced and used multi currencies for transacting. This period also gave every economic player including MFIs a new lease of life following the prior period of hyperinflation.

1.9 Dissertation outline
This research paper is organised into five chapters as follows:

Chapter 1 provides the background information necessary to fully understand the underlying microfinance problem which this study seeks to address. A brief profile of the ZMWF which is the subject of the case covered in this study is also covered. In addition, formulation of research objectives and questions are brought up as well as the general scope of the research.

Chapter 2 is about the general theoretical framework wherein key microfinance definitions and concepts are defined and explained in the context of the study under review. The chapter also covers works and findings of other scholars as they relate to pricing of loan products by MFIs and their related loan portfolio performances.

Chapter 3 covers techniques used and procedures that were followed by the researcher in carrying out this study with a view to answer research questions raised in Chapter 1. Thus it broadly covers the population and sampling techniques, research instruments and data analysis methods used as well as data credibility issues.

Chapter 4 contains the empirical study wherein all the research findings are presented. Research findings were in this case analysed and put into the context of the study under consideration.

Lastly, Chapter 5 uses the Chapter 4 analysis to draw general conclusions from the findings, ending by giving recommendations well informed of the gaps noted in the findings. The chapter signs off by providing suggestions for future research within the area of loan pricing.
1.10 Chapter summary

Chapter 1 covered the background information within the context of the research objectives and questions as they relate to loan pricing issues and the attendant loan portfolio performances of MFIs in Zimbabwe. A brief organisational profile of the ZMWF was also covered as it forms the subject of the study.
CHAPTER 2
LITERATURE REVIEW

2 Introduction

This chapter reviews work and findings of other scholars as they relate to pricing of loan products by MFIs. It covers areas to do with the concept of loan pricing in micro financing, key determinants of loan pricing, the concept of loan portfolio performance and its related indicators. Also covered is literature relating to the relationship between loan pricing and portfolio performance in MFIs. From this review, a conceptual framework was developed in accordance with the author’s comprehension of the issues discussed.

2.1 Microfinance defined

In Zimbabwe, the National Microfinance Policy (2007) defines microfinance as the provision of a range of financial services including savings, small loans, insurance and money transfer services to marginalised members of the population and small to medium enterprises (SMEs) that do not have access to financial services from the conventional banking system. Since microfinance includes a wide range of financial services as defined in the policy manual, this paper focused on pricing issues relating to the provision of small loans since they are the dominant all microfinance services.

2.2 Concept of pricing in micro financing

Helms and Reille (2004) noted that there is an apparent lack of transparency by MFIs on the way interest rates are calculated largely emanating from a lack of a proper definition of interest rate. A loan is just like any other product offered in the market. It is underwritten to end beneficiaries at a price known as the interest rate which represents a rate of return to MFIs. It is from this interest charge that MFIs derive the greater part of its income and a cost to borrowers. There are basically two charges that MFIs levy on their services namely; interest rate as well as fees and commissions (Njuguma, 2008). Fees and commissions on the other hand represent a charge in the form of a specific amount for a loan transaction, for instance, a charge to cover the cost of processing a loan application, costs related to
establishing and maintaining a loan account. Thus loan pricing refers to a combination of levying interest rates as well as fees and commissions or any other charge on a loan product.

Rosenberg, Gaul, Ford and Tomilova (2013) note that, the most controversial dimension of microcredit is on the pricing of various loan products offered by MFIs. Such loan prices are occasionally higher than the normal bank rates on account of the fact that it is generally more costly to lend and collect an amount through several micro loans than to lend and collect the same through few and large loans (Guntz, 2011). MFIs incur a higher cost per dollar lent than banks hence the need to charge higher interest rates (Cull, Demirguc-Kunt and Murdoch, 2009). Marsland and Strom (2008) believe that the first goal of micro financing is to reach out to a large number of beneficiaries in the poorer strata of the population while the issue of financial sustainability of MFIs comes second. This is against the realisation that in recent years the issue of financial sustainability has been uppermost in the hearts of many microfinance practitioners and this can only be achieved by charging the poor entrepreneurs high interest rates. In the same vein, Hermesy and Lensink (2007) note that even if an MFI is more inclined towards financial sustainability, it has to adopt more appropriate loan prices and deliver greater efficiencies at the same time.

Copestake (2007) argues that for MFIs to go for high interest rates there is a danger that they may abandon servicing the poor in what is referred to as “mission drift” by some commentators. In a study, Mersland and Strom (2010) also observe that increase in profitability by MFIs as a result of charging high interest rates promote mission drift – thus a movement from serving the original social goals (of outreach and poverty alleviation) which microfinance seeks to address to the selfish financial goals of profitability. Dehejia, Montgomery and Murdoch (2012) concur that high interest rates undermine “the original intention and the push for microfinance.” In the same vein, Daher and Saout (2013) note that the rapid growth of the microfinance sector over the last decade has meant that the goal of MFIs has shifted from poverty eradication and financial inclusion to financial sustainability, self-reliant and subsidy free – of which these goals can largely be attained by hiking interest rates to borrowers. In a study conducted from March 1999 to March 2001 by Tucker and Miles (2004) it was found that self-sustaining MFIs are more profitable and generate higher returns on equity (ROE) than those supported by subsidies. The idea here was that the ability to generate sufficient profits and cover all expenses and be able to eliminate subsidies, MFIs need to review their pricing policy in line with these goals. Waterfield (2011) in his report
prepared for the 2012 Micro Credit Summit observes that fair pricing of micro credit products was important for a balance between financial sustainability and social goals calling for what he termed “responsible commercialization” in the microfinance sector. Waterfield (2012) later reports that the triple MFI objectives of growth, profit and compensation levels, if unchecked, will lead to MFIs charging usurious interest rates to achieve the three – thereby fulfilling the objectives of lenders at the expense of the borrowers.

Taylor (2011) also argues that high interest rates by MFIs promotes debt trap for the borrowers which may compromise their loan repayment ability. High interest rates have also been observed to hinder the uptake of and demand for micro loans, thereby hindering the original intention of microfinance (Dehejia et al., 2012). With the global campaign for financial inclusion among the unbanked, there is a general concern that high interest rates reduce demand and uptake of microfinance services.

Boardreaux and Cowen (2008) note that such high interest rates had tended to attract private investments in the sector in recent years as the rates so charged represent revenue. MFIs have been arguing that they charge these high interest rates to ensure sustainability of operations arguing that this is key to the successful provision of micro finance services (Brau and Woller, 2004). In an earlier research Woller (2002) observes that the poor people are a bankable lot, and as such, MFIs should move towards getting guided by market forces (profit orientation) by charging interest rates that ensure continued viability. In the same vein, empirical data from a study by Hermes and Lensink (2004) suggest that the poor can afford high interest rates. Also in support of this observation, is that there has been an increase in commercialization of MFIs from being donor driven to private ownership – a phenomenon which has seen growth in the microfinance sector (Robinson, 2001). It has also been argued that high microfinance interest rates can only be criticized if MFIs report very high profits or when such rates are as a result of avoidable massive operational inefficiencies on the part of the MFIs (Rosenberg, Gonzalez and Narain, 2009).

Julien (2014) notes that interest rates on microfinance products differ across regions and also vary depending on the institutional frameworks of MFIs offering these services with those charging high rates able to expand operations and reach out to many borrowers. Related to that, Roodmam (2011) discovers that it is very difficult to come up with a fair price for micro credit products because of differing dynamics in various MFIs as well as in different regions.
or parts of the world. MFI s in regions such as the Latin America and the Caribbean Islands charge rates as high as 109% per month which policy makers, politicians and entrepreneurs consider excessively high (Campion, Ekker and Wenner, 2010). In some researches done in Mexico, Malkin (2008) notes that MFIs can still benefit more clients by charging lower interest rates and at the same time enjoy respectable growth and sustainability.

The Reserve Bank of Zimbabwe (2014) in its first quarter industry report alludes to the fact that one of the problems that have been contributing to high levels of NPLs has been the high interest rates charged by microfinance institutions. The Smart Campaign (2011) in its quest to protect the interest of borrowers or microfinance clients has called for transparency in the way interest rate charges are calculated adding that it is in the interest of the borrowers to know how the rates are calculated before even signing the loan agreement. This tallies with the requirements of the new Microfinance Act Number 3 of 2013 (Chapter 24:29) particularly Section 15 (subsection 2 b and c) that requires MFIs to display information pertaining to the annual interest rates and other charges on their loans and advances. This campaign also has support from authors such as Hudon (2009) who explains that high interest rates are “unjust or potentially harmful” to borrowers and therefore the need to protect clients from extortionate charges. In the district of Andhra Pradesh in India, Hudon (2007) notes that 50 branches of two leading MFIs were in 2006 closed with condemnation over the usurious interest rates and unethical recovery practices. He further also observed that interest rates offered by MFIs to the poor were on the high side relative to what established financial institutions like commercial banks offer.

However, in line with the thinking of policy makers and entrepreneurs, Johnston and Morduch (2008) argue that subsidized or low interest rates are conducive for the poor as they can easily afford them. In other regions, it has been observed that high interest rates have not been affecting the poor borrowers’ income generating projects as they put emphasis on access to funds. From a study by Murdoch (2000) interest rates charged by some MFIs in certain regions ranged from 100% to 800% per annum but what was of a surprise was that the entrepreneurial poor kept on borrowing as access to credit seemed more important that the cost of the borrowing. Helms and Reille (2004) followed this up as they discovered that repayment rates for some MFIs particularly in Kenya, India and Philippines were as high 95% to 98% per annum which was an indication that the borrowers could afford the repayments regardless of costs. In support of this, Curl et al (2009) suggest that earning high
interest income does not necessarily mean financial sustainability. To support this assertion, a study of 1109 MFIs to determine the differences between sustainable and non-sustainable MFIs, by Sara (2011) reveals that sustainable MFIs have been successful in better cutting their costs and become more efficient, leading to sustainability and still able to charge their clients less.

2.3 Determinants of loan pricing in micro financing

Pafula (2003) views the determinants of loan pricing as emanating from two angles – namely the customer (borrower) and the lender’s (MFI) perspectives. To the customer, loan interest is just viewed as a cost of accessing a loan. On the flip side, MFIs see loan pricing as determined by cost of loan production, inflation rate, cost of loan delivery, personnel and administration costs and capital growth (Kasibante, 2001). In an almost similar observation and in a paper for the World Council of Credit Unions (WCCU) on loan pricing for SACCOs, Njuguna (2008) identifies the forces of supply and demand as a key determinant in MFI product pricing. Buyers who are the borrowers try to get as much as is possible in terms of loans at very low rates while on the other hand sellers(MFIs) try to lend at rates that are as high as possible to make profits. At the end of the day an equilibrium price is always levied to end beneficiaries but more so skewed towards the interests of MFIs.

Mcloughlin (2013) observes that the determination of micro credit pricing is largely dependent on two factors namely: the need to cover operating costs and need for operational sustainability. In addition to that, Rosenberg et al., (2013) in their paper that used empirical data from 2004 and 2011 on several MFIs submitting performance reports to the Microfinance Information Exchange (MIX) identify cost of funds, loan loss expenses, loan size, and operating expenses as the key determinants of microfinance loan pricing. Furthermore, the cost of a loan is also affected by the outreach levels of an MFI, thus whether an MFI targets a rural or an urban market with the former tending to attract a higher cost due to higher dispersion levels of the population. The age and size an MFI (as measured by branch network, number of clients served and portfolio size) also affects its pricing levels with older and bigger MFIs tending to charge less to their clients (Rosenberg et al., 2013). In a policy research paper of interest rate levels in Bangladesh, Faruqee and Khalily (2011) come up with six determinants on loan pricing in that country which include: the need to cover cost of funds used to originate the loans, need to cover administrative expenses, contingency reserve (provision for bad debts), tax expenses, credit rating of buyers and
capitalisation rate. Likewise, Nagarsekar (2012) identifies three key factors that determine MFI loan pricing as need to cover cost of capital, operating expenses and bad debts.

Goodwin-Groen (2012) notes that microcredit interest rates are generally set with the objective of providing a viable, long term financial services on a large scale to the end beneficiaries. What this entails is that MFIs have to set interest rates that are enough to cover their operational and administrative costs. Failure of the MFI’s pricing policy to cover the above mentioned costs means that its life span will be short lived after only having reached out to a limited number of clients. As such Goodwin-Groen (2012) further believes that this situation may end up influencing MFIs to seek donor funding which has the general effect of distorting the overall mission of MFIs to the economically active poor. In a paper aimed at influencing its MFI partners to practice “responsible pricing”, ZMWF (2013) cited five key determinants that “have potential to influence interest rates” for Zimbabwean based MFIs. These were cited as need to cover operating costs, loan losses, cost of funds, the need to make profits and inflation induced pricing.

In a study of 29 MFIs in seven countries in Latin America and the Caribbean over a period of four years Campion, Ekker and Wenner (2010) identify the need to cover operating costs and loan losses as the key determinants of interest rates in the microfinance sector in addition to the ownership structure and configuration of the organisation. They further note that interest rates are likely to be high in jurisdictions where macroeconomic conditions are rather poor, infrastructure is also poor, weak business environment and where human capital is scarce. Competition levels, lack of adequate security or collateral, weak contract enforcement, high political risk and weak regulatory pressure are some of the external factors that indirectly influence MFI loan pricing.

In a World Bank research in Sri Lanka and Mexico, De Mel, McKenzie and Woodruff (2007) find that monthly interest rates are high in non-farm micro-entrepreneurial activities suggesting that interest rates can also be determined depending on the sector being served by MFIs or the type of products offered. Similarly, Bidwell (2009) in another study of MFIs in Ghana finds that interest rates are high for agriculture related activities as farmers believe that access to credit is more important than its cost.

MFI funders in other jurisdictions have an influence – both directly and indirectly to the pricing levels on loans originated from their funding. The CGAP (2006) insinuates that
funding especially from the donor community and government agencies come with conditions that loans therefrom must be priced at certain pricing levels. This is also supported by The Russian Microfinance Project (2000) that some models of donor financed programmes set interest rates for loans at extremely low levels with MFIs retailing such loans running the risk of discontinuing operations due to sustainability issues.

Rosenberg (2002) seems to have summarised observations by other researchers when he developed a simplified model for approximating sustainable interest rate levels for MFIs. The model is summarized by the formula given in Figure 2.1 below:

\[
R = \frac{AE + LL + CF + K - II}{1 - LL}
\]

Where:
- \(R\) = Effective interest rate
- \(AE\) = Administrative expenses
- \(LL\) = Loan losses
- \(CF\) = Cost of funds
- \(K\) = Capitalisation rate
- \(II\) = Investment income

**Figure 2.1 Model for loan pricing determinants**

Effective interest rate refers to the final loan pricing.

According to Rosenberg (2002) administrative expenses include all annual recurrent costs like personnel related costs, rentals and utilities, travelling, communication and depreciation of fixed assets. These according to Rosenberg et al. (2013) consume the majority of the income of the micro finance institutions’ loan portfolios and as such this component is the largest determinant of the rate the borrowers end up paying.

Loan loss expenses represent the lowered likelihood that a certain portion of the loan book will not be collected in full (Rosenberg et al., 2013).
Cost of funds, according to Rosenberg (2002) represents the projected future “market” cost of funds as MFIs grow past the dependency on subsidized donor finance, drawing large portions of its funding from commercial sources, usually in the form of debt finance.

Capitalization rate represents the net “real” profit set aside for future financing of the loan book growth expressed as a percentage of the average loan portfolio (Rosenberg, 2002). Accumulating such profits overtime is critical as it reduces the future appetite for expensive debt financing by MFIs as they will now have to use their equity resources to finance growth of their loan books.

Investment income rate in the model in Figure 2.1 above is expressed as a deduction and represents the income expected from the MFI’s financial assets other than its loan portfolio (Rosenberg, 2002). These include bank deposits, fixed deposits in financial institutions and any other investments in cash resources. This portion of the equation is very small as such assets accrue little or no income at all.

So the above variables according to Rosenberg (2002) form key determinants of loan pricing in some jurisdictions and are expressed as a percentage of outstanding portfolio. The above model was in response to a more complicated model that had been developed using Microfin – a planning and financial modeling tool – which involved the use of excel spreadsheet in projecting month on month financials for MFIs (Lunde, 2001).

2.4 Loan portfolio performance
Mulema (2011) defines loan portfolio as the total amount of money given out to borrowers by a particular MFI at any given point in time. He further defines loan portfolio performance as rate of profitability or rate of return on an investment in various loan products. In broader terms, Mulema (2011) refers to portfolio performance as number of microfinance clients accessing loans, how much they are borrowing, timely repayments of installments, security pledged against loans and rate of recovery of loans in arrears. Wright, Arunachalam, Sharma and Moulich (2006) assert that loan portfolio is the primary income generating asset of any MFI and needs proper management to avoid deterioration in its quality. According to Lafourcade, Isern, Mwangi and Brown (2005), portfolio performance relates to management of the risk of loan delinquency and determines future revenue generation and an institution’s ability to increase its outreach and serve existing clients.
The microfinance industry has key portfolio performance indicators as developed by the Roundtable Group comprising Microrate – a leading microfinance rating agency, Inter-American Development Bank (IDB), the Consultative Group to Assist the Poor (CGAP), the United States Agency for International Development (USAID) and two other rating agencies namely MCRIL and PlaNet Rating (Stauffenberg, Jansson and Kenyon, 2003). A final list of these portfolio performance indicators were then published by Barres, Bruett, Curran, Nelson, Norell, Porter, Stephens and Stephens (2005) and these indicators were identified as portfolio at risk (PaR), provision expenses ratio, risk coverage ratio, and write off ratio. Similarly, the CGAP (2001) identifies key portfolio performance indicators as the following: PaR, recovery rate, collection rate, arrears rate and annual loan losses. In addition, Rosenberg (2009) identified the breadth (number of clients served) and the width (client poverty level or how much clients have been accessed) of outreach as another measure of portfolio performance. Further, Kar and Swain (2014) identify yield on portfolio as another indicator of portfolio performance for MFIs. Portfolio performance highlights based on data from 147 MFIs from 53 countries between 2001 and 2002 focused on indicators such as loans outstanding as a percentage of Gross National Product (GNP) per capital, return of assets, operating self-sufficiency, portfolio yield and PaR over 90 days (Moss, 2003). Warue (2012) identify loan delinquency as a key component of portfolio performance which he says comprise three factors namely loan collection rate, arrears rate and PaR while Joana (2000) identifies two components being arrears rate and PaR. All these authors however concur that the widely accepted portfolio performance indicator by MFIs is PaR.

The researcher had to settle for only six loan portfolio performance indicators on account of being the most common amongst MFIs studied. Below are brief definitions of the indicators used in the study:

**PaR** represents the portion of the loan portfolio that is contaminated by arrears hence putting it at risk of not being repaid (Rosenberg et al., 2013). It is expressed as a percentage.

**Collection rate** is sometimes referred to as repayment rate and represents a measure of the amount actually paid by borrowers against the total due from them (Warue, 2012). It is expressed as a percentage.

**Arrears rate** is best explained as a formula and is expressed in percentage terms. It refers to the amount past due or overdue as measured against total loan book size (Warue, 2012).
Write off ratio represents the percentage or portion of the MFI’s loans that have been taken off the gross loan portfolio that is unlikely to pay (Barres et al, 2005).

Number of clients served represents the active number of borrowers as at any particular date.

Loan book size is sometimes referred to as loan portfolio as defined by Philip (2011).

This paper sought to establish the relationship between loan pricing and some of the above portfolio indicators.

2.5 Relationship between loan pricing and portfolio performance
The relationship between loan pricing in MFIs and portfolio performance is not widely covered in microfinance literature. Kaggwa (2013) carried out a study to determine the same kind of relationship but confined her study in Uganda’s commercial banks. Since commercial banks largely derive their income from interest income emanating from lending business, parallels can however be drawn with the same relationship in the microfinance sector. In her study which attracted 73 respondents, Kaggwa (2013) notes that favourable interest rates in commercial banks promote increase in demand for loans. However in terms of portfolio performance, favourable pricing of loans should be complemented by sound credit management policies and proper screening of loans by the banks to achieve a positive performance in portfolio. At Centenary Bank which was the subject of study by Kaggwa (2013), portfolio performance was low because of high interest rates charged by the bank – which tended to discourage demand for loans. Kaggwa (2013) reveals that fair interest rates favour clients’ willingness to repay loan affordably. She further asserts that effective loan portfolio management leads to an institution’s safety and soundness. In support of the above findings, Pasha and Khemraj (2010) also discover that interest rates (loan pricing) and non-performing loans (NPLs) – which are synonymous with PaRs and arrears rate – are positively correlated.

In a study of 45 MFIs between 1999 and 2003, Luzzi and Weber (2006) identify four determinants of financial and portfolio performances in MFIs of which loan pricing policy was noted to be the key contributor with higher prices likely to bring higher ROE. In almost a similar study of 83 MFIs of different types in Latin America, North Africa, the Middle East and Asia, Huddon (2010) notes that portfolio performance of MFIs are largely determined by management issues as opposed to any other factors. This observation was also noted earlier
by Roberts (2009) who asserts that there is a positive relationship between the need for profit and charging high interest rates.

In a study of the relationship between loan policies and loan portfolio performance, Pafula (2003) concludes that interest rate administration along with other factors such as loan size, loan period, collateral and outreach are key to positive portfolio performance of any MFI. Pafula (2003) also identifies loan performance as the prime variable of interest rates charged by MFIs. In a casual study of macroeconomic implications on portfolio performance in Sub Saharan countries, Fofack (2005) discovers that macroeconomic stability and economic growth promote good portfolio performance while high interest rates on loans promote a poor portfolio performance.

2.6 Conceptional framework
Judging by the foregoing literature review, a conceptual model was developed therefrom in the context of understanding issues as they relate to factors that influence the setting of loan pricing by MFIs in addition to determining the relationship that exists between such loan pricing and loan portfolio performance. The logic behind the construction of this framework was that the independent variables (loan pricing including its determinants) must function in such a way as to influence loan portfolio performance.

Out of all the variables discussed above, the researcher focussed on the following in the study:
**Table 2.1 – Variables used in this study**

<table>
<thead>
<tr>
<th>Variables</th>
<th>Loan pricing and its determinants such as:</th>
<th>Loan performance was identified as a dependent variable. This comprises of performance indicators such as:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Independent variables</td>
<td>• Operating costs</td>
<td>• Outreach (loan book size and number of clients served)</td>
</tr>
<tr>
<td></td>
<td>• Need for profits and sustainability</td>
<td>• Portfolio at risk</td>
</tr>
<tr>
<td></td>
<td>• Cost of funds</td>
<td>• Loan collection rate</td>
</tr>
<tr>
<td>Intervening variables</td>
<td>These are largely external macroeconomic conditions such as:</td>
<td>• Arrears rate</td>
</tr>
<tr>
<td></td>
<td>• Regulatory pressure</td>
<td>• Write off ratio</td>
</tr>
<tr>
<td></td>
<td>• Client credit rating</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• High political risk</td>
<td></td>
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</tbody>
</table>

*Source: Author (2014)*

Figure 2.2 below depicts the conceptual framework that the researcher developed using the variables used in Table 2.1 above.

In the framework, a dependent variable is the prime variable of interest to the study. It was in this case identified as loan portfolio performance as measured by the key portfolio indicators including but not limited to outreach levels (both loan book size and number of clients served), portfolio at risk, arrears rate, loan write offs and collection rate.
On the other side of the framework, independent variables have been identified as a collection of factors directly influencing loan portfolio performance. For the purpose of this study, they were identified as the loan price and its key determinants or elements internal to and controllable by the MFIs themselves. These factors include operational costs, cost of funding and need for profits and sustainability by the MFIs. In this particular case, these casual factors do not have a direct influence on portfolio performance as this comes as a chain where they directly influence the loan price which in turn directly affects, in one way or the other, the respective MFIs’ portfolio performances.

The framework also touches on mediating or intervening variables which in this particular case are largely market factors or external variables to the MFIs whose direct control on them is to a large extent weak. These are the factors that also influence the relationship between the independent (loan pricing and its elements) and the dependent variable (portfolio performance). They include but not limited to regulatory pressure, client credit rating and political risk. These have been picked amongst a number of variables by the researcher based on expert advice from ZAMFI. These variables have also been noted to have a direct relationship with the dependent variable apart from also directly contributing to the levels of the independent variable.

In the context of the study, regulatory pressure was identified as influence from policy and rule makers like the RBZ and the Government of Zimbabwe (GoZ) in the setting of pricing levels among MFIs. Political risk refers to probability of loss by MFIs as a result of the obtaining political instability in the country and policy inconsistency by the GoZ. Client rating is the general creditworthiness of the borrowers and in this regard refers to the ability of the borrowers to repay their loans with MFI.
Figure 2.2: Conceptual framework of study
2.7 Chapter summary
The chapter covered a review of studies and findings by other scholars elsewhere in the world in the field of loan pricing by MFIs. Literature was therefore reviewed on the general concept of loan pricing, the key determinants of loan pricing in MFIs, the concept of loan portfolio performance and its related key indicators. The chapter also covered literature as it relates to the relationship between loan pricing and loan portfolio performance. From the review of the literature, a conceptual framework was then developed to summarise the comprehension of the key issues by the researcher.
CHAPTER 3

RESEARCH METHODOLOGY

3 Introduction
This chapter outlines the techniques used in carrying out this study. It describes the procedures that were followed by the researcher in carrying out the study. The chapter provides the research design used wherein the research philosophy and strategy are discussed. Also covered in the chapter are the population and sampling techniques, the sources of data used, the procedure used to collect the data (the research instruments), data analysis, research limitation, ethical and data credibility issues and then concludes with a brief summary of the chapter. It is also important to note that at each stage, the researcher gave rationale for the action taken fully giving an explanation of the reasons behind such actions.

3.1 Research design
According to Kothari (2004) a research design is the systematic, theoretical analysis of the procedures applied in a field study. It thus, constitutes the blueprint for the collection, measurement and analysis of data. It is also a set of procedures of describing, explaining and predicting a phenomenon so as to solve a problem.

3.1.1 Research philosophy
Croswell (2009) suggest that any research may take either a qualitative and quantitative approach. As such the researcher used the quantitative approach seeing that it produces a methodological inquiry which examines relationships among variables already outlined in the literature. Bryman (2008) describes this approach as entailing collection of numerical data which exhibits a view of the relationship between known theories and the actual research which holds an objectivist conception of social reality. The study also largely employed quantitative methods because they permit a flexible and iterative approach during the process of collecting data (Saunders et al., 2009).

In every research, research methodologies depend on various philosophical persuasions of the researchers. As put forward by Saunders et al., (2009) these also include both theoretical and philosophical assumptions upon which the research is based. According to Creswell (2009) research philosophy or paradigm or worldview is a set of beliefs which researchers naturally
have on various subjects of discussion. Bryman and Bell (2008) note that all research approaches fall between two broad categories (of contrasting extremes) of research philosophies, namely, phenomenological and positivism views. While the phenomenological is a qualitative research view, which was not used in the study under consideration, positivism is a quantitative research view which consists of formulating and testing a hypothesis using quantitative data in search of any themes emerging from the study (Bryman, 2008). As such, the researcher deduced the hypothesis, which was subjected to testing, based on what is a largely believed and the theoretical considerations with regards to the research problem under consideration.

3.1.2 Research strategy

In this study, a descriptive, cross-sectional sample survey was chosen as the most appropriate research design to answer the research objective and test the hypothesis. Some of the advantages of this design are that the design enables the researcher to target a very specific population. According to Saunders et al. (2009) the survey is a popular and common strategy in business and management research and is usually associated with the deductive approach. It allows collection of large amounts of data from a sizeable population in a highly economical way. If the data is obtained using a questionnaire, it allows easy comparison through standardization of the data. This study used a quantitative and structured descriptive survey method as a tool for primary data collection. Kothari (2004) further highlights that descriptive research studies are more concerned with the description of the characteristics of a particular individual or group; whereas diagnostic research studies determine the frequency with which something occurs or its association with other variables.

The survey method was deemed most applicable strategy by the researcher. A survey was carried out through the distribution of 48 questionnaires to all MFIs funded by ZMWF. It enabled the researcher to learn more about, attitudes and opinions of MFIs funded by ZMWF on how they price their loans and whether such prices affected their respective institutional portfolio performance.
3.2 Population and sampling techniques

3.2.1 Population
The target population consisted of all MFIs that received funding from the ZMWF. Portfolio reports produced by ZMWF as at 31 December 2014 indicated that eighteen MFIs had accessed funding under its programmes. It must also be noted at this juncture that as at 30 June 2014 Zimbabwe had 130 legally registered MFIs (RBZ, 2014b). With 67% of loans as at the same date going towards consumption, that left 33% being for business and productive purposes. The researcher used this indicative proportion to allocate the number of MFIs that are involved in pure business and productive lending to about forty three (43) out of 130. Revisiting the objective of the study, it is important to note the study was confined to only those MFIs that practice ‘real micro financing’ by targeting the micro, small and medium enterprises as per the National Microfinance Policy definition given in Chapter 2 above. The implication of this is that very few MFIs are involved in business and productive lending. ZMWF also indicated that it has a limited target market from this and was planning to extend its market to non-registered financiers such as agriculture producer organizations. Such was the predicament faced by the researcher that he had to settle for a somewhat small population size which was limited to only eighteen MFIs funded by ZMWF which represented 42% (18 out of 43) of the MFIs that are deemed to be involved in business and productive lending in the whole of Zimbabwe. By this, the researcher is of the view that this was representative enough to constitute a research population to meet the research objectives.

3.2.2 Sampling
The researcher employed a combination of both probability and non-probability sampling techniques. Under probability sampling each population member has a known, non-zero chance of inclusion in the sample where members are drawn with a random selection mechanism (Blair, 2009). On the other hand, in non-probability sampling, there are no known probabilities of a population member being included in a sample (Wretman, 2010).

To come up with a sample size, the researcher used the Krejcie and Morgan (1970) model. There were 55 managers (at an average of three managers per MFI) at the 18 MFIs funded by ZMWF; hence a sample of 48 was drawn. According to Bryman, (2008) in support of the Krejcie and Morgan model, this sample size was considered to be acceptable in order to come
up with results that were valid. The table below shows the recommended sample sizes for selected population sizes as given by Krejcie and Morgan (1970).

Table 3.1 Choosing sample size: Krejcie and Morgan model

<table>
<thead>
<tr>
<th>Population (N)</th>
<th>Sample (S)</th>
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<tbody>
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<td>10</td>
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<td>48</td>
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</table>

Source: Krejcie and Morgan (1970)

Judgmental and expert sampling were also used as the researcher used his judgment or discretion in selecting managers of the 18 MFIs as the best sampling unit to make up the sample for the study. This is because the researcher believed and had recognized through his experience in the sector that the management teams of each unit of the 18 MFIs were the experts on price determination of loans and had the necessary knowledge on whether such prices affected their respective institutional portfolio performance. According to Wegner (2006), in judgmental sampling, the researcher uses his own discretion or judgment to choose the best sampling units to make up the sample. Under probability sampling, the researcher initially employed a stratified sampling technique wherein MFIs funded by ZMWF were categorized into three strata as follows:
Table 3.2 Strata of the population

<table>
<thead>
<tr>
<th>Category Number</th>
<th>Name of Strata or Category</th>
<th>Number of population members</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Credit only MFIs</td>
<td>12</td>
</tr>
<tr>
<td>2</td>
<td>Bank owned MFIs</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>SACCOs</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>18</strong></td>
</tr>
</tbody>
</table>

*Source: Researcher (2015)*

The researcher decided to use these categories well informed by the review of literature that organizational form and ownership influences how MFIs price their loan products. The essence of stratification is the categorization of population into mutually exclusive subpopulations called strata (Blair, 2009). The researcher used this technique because of the heterogeneous nature of the population which had three distinctive categories as in Table 3.2 above. The idea was to obtain information relating to each stratum and synchronize the findings to one logical conclusion. As such determinants of interest rates were noted to be largely common in all the three categories and so was the effect of the MFI pricing on portfolio performance. Respondents were also drawn from MFIs headquartered in Harare, Bulawayo, Masvingo and Karoi but with operations in all the provinces of the country.

Following the above stratification, the researcher then followed this up by carrying out simple random sampling wherein respondents in category number 1 in Table 3.2 above stood a chance of being selected as Blair (2009) also notes. As such managers from the 18 MFIs were randomly selected using simple random sampling on a first-come-first-serve basis depending on their availability. Thus the sampling also became convenience sampling to some extent as the researcher could only choose those who were available during the period of the study. Furthermore, the researcher also used quota sampling as he kept selecting the managers on a first-come-first-serve basis according to their availability until the sample size of 48 was reached. This is in line with Blair (2009) who defined quota sampling as a non-probability sampling method whereby a researcher keeps going until the sample size is reached. Therefore, this study’s sampling ‘quota’ was 48 managers.
3.3 Sources of data
The data (both primary and secondary) was collected from both the primary and secondary sources. Primary research was obtained using 48 self-administered questionnaires which the researcher sent to the MFIs funded by ZMWF as a way of achieving the research objectives. The researcher used primary research, particularly questionnaires, because it enabled obtaining of first-hand information from management of these MFIs on how they price their loans and whether such prices had been affecting their respective institutional portfolio performance. On the hand, the researcher also obtained secondary data largely from views and writings of various authors who had carried out studies relating to determinants of MFI pricing and its effects on the MFI’s portfolio performance. Secondary data was obtained from loan portfolio reports from both ZMWF and some of the selected MFIs as well as newspaper reports on the microfinance sector in addition to that of the sampled MFIs. After obtaining the data, it was processed and synthesized with the aim of getting highlights of themes emerging from these studies which the researcher applied to the research problem under consideration.

3.4 Data collection procedure (Research instruments)
As mentioned in Section 3.4 above, to collect primary data, the main research instrument used was the questionnaire. The researcher distributed 48 questionnaires to the 18 MFIs funded by ZMWF. According to Saunders et al. (2009), questionnaires are a valuable method of collecting a wide range of data from varied respondents and are usually very simple during data analysis. Furthermore, Amin (2005) asserts that questionnaires are a familiar and effective data collection instrument as collection is done fairly and easily with responses also easy to code. In addition participants have the time to complete them at their convenience.

Self-administered questions are naturally appropriate for such surveys and the questionnaire itself had specific questions which allowed respondents to choose one answer out of a series of alternatives partially designed using the Likert Scale. The questionnaire was constructed in line with the research objectives. The researcher made some effort to try and come up with appropriate and relevant questions which followed a systematic flow in order to come up with results that truly reflect the views of the respondents.

These tools enabled collection of a large pool of data in a given short period of time for the study. The tools enabled management of the MFIs to provide information as to how they
priced their loan products and also determine whether such pricing affected either positively or negatively their portfolio performances.

Apart from the questionnaires, data was also collected through document review. Thus, secondary data was also collected using documentary analysis by reviewing information on documents pertaining to periodic portfolio reports from the respective MFIs and ZMWF. Such review of MFI documentation was critical in saving the researcher’s time in addition to also allowing longitudinal (time series analysis) and international comparative analysis (Ghauri, 2005). Information gotten from the portfolio reports was mainly portfolio performance indicators which were used as proxies for portfolio performance.

### 3.5 Data analysis

After collecting the data, descriptive (involved use of means and standard deviations) and inferential statistical were used to analyse the data. Furthermore, the researcher used the Statistical Package for Social Sciences (SPSS) in the analysis of the study findings. This tool (SPSS) has proven over time to be widely used and covers procedures and allows for data summarization and analysis of relationships among variables. Regression and correlation analysis was also used to determine the relationship among the variables.

### 3.6 Research limitations

The following limitations were encountered by the researcher during data collection:

i. Respondents were sceptical to share sensitive portfolio figures with the researcher largely due to the fear of having the information shared with rivals. The researcher had to lobby the respondents who also happen to be senior managers at the respective MFIs to have the information released.

ii. It was also noted that respondents sometimes took time to respond as they were too busy planning for the new 2015 financial year. The researcher continued to engage the respondents for quick turnaround times.

iii. Lack of adequate information emanating from the fact that most of the MFIs interviewed had incomplete records on some transactions. To get adequate information on portfolio performance, the researcher took his time to liaise with ZMWF on the possibility of sharing such sensitive information which was eventually gotten to authenticate information from MFIs.
3.7 Research ethics and data credibility

3.7.1 Research ethics
To the best of his ability, the researcher attempted to comply with principles of informed consent and confidentiality as well as data protection. In this study, the researcher ensured that all participants had informed consent in order to ensure respect of their “physical and personal anatomy” (University of Derby, 2011). As such, prior to administering the research instrument on the participants, the researcher took time to interact with them, informing them of the nature and purpose of the study (Israel and Hay, 2006). Issues of the participants’ right to privacy were also explained to them and as such their right to confidentiality and anonymity was to the best of the researcher’s ability maintained throughout the research. Further the researcher clearly explained to the participants of the right to withdraw from the research at any given time during the study. Participants were also assured that collected data was going to be used for the consent granted (Oliver, 2003) which in this case was for academic purposes. Also ensured was the need not to misrepresent other researchers or authors’ work during the review of literature by ensuring that recognition and citation of references was done wherever possible.

3.7.2 Data reliability
Golafshani (2003) cited Joppe (2000) as defining data reliability as the extent to which results are consistent over time and an accurate representation of the population under study. According to Golafshani (2003), Joppe (2000) notes that if results are reproduced under a different methodology then the research instrument can also be considered reliable. To ensure reliability, the researcher obtained data from top management who have proven experience in the microfinance sector in addition to having been involved in running their respective institutions for a minimum average of three years hence had deep institutional memory. Furthermore, the questionnaire required respondents with technical knowledge of the study variables which these managers had. Data was also extracted from periodic internal portfolio reports which are used regularly in decision making by management. It is also important to note that the sample was also representative enough in terms of different types of MFIs as highlighted in Table 3.2 above. Instrument reliability was also ensured by consulting experts during questionnaire design.
3.7.3 Data validity
Carter and Porter (2000) explain that validity is both internal and external further noting that internal validity relates to the extent to which research design is a good test of the hypothesis or is appropriate for the research question. In turn, external validity relates whether or not research findings can be generalized beyond the study sample and setting. Further to that Carter and Porter (2000) identified measures of validity of data collection tools as content, criterion and construct validity. In this study the researcher ensured validity through triangulating the results (where possible) by comparing questionnaire responses with data from other internal sources like portfolio and financial reports from the respective MFIs and ZMWF. The researcher also asked for time with some of the respondents to review the responses after completing the questionnaires and reviewed them although deviations were in this case very few and immaterial.

3.8 Chapter summary
The chapter covered the procedures that were followed in conducting the study. Sections covered include research design used, the population and the sampling techniques employed by the researcher. It also covered the two sources used to obtain data and the key instruments used to collect the same. Towards the end, the chapter covered the data analytical tools used, research limitations as well as ethical and data credibility (reliability and validity) considerations.
CHAPTER 4
DATA PRESENTATION AND ANALYSIS OF FINDINGS

4 Introduction

This chapter provides a data presentation and analysis of the findings from the research. The researcher divided this chapter into two phases; data analysis and data presentation. In data analysis, the gathered data was recorded then patterns that emerged from it identified. These patterns were either general or were new revelations from the data. In data presentation the researcher presented data in such a way that it is easily understood, informative and not hidden. The primary data collected was critically analyzed in order to answer the research questions.

4.1 Response Rate

A total of 48 questionnaires were distributed to the managers of the 18 MFIs under ZMWF and a total of 32 questionnaires were received from the respondents. This represents a response rate of 66%. This is in line with Hart, Breman and Sym (2010) who postulated that a response rate which is 60% or more is sufficient to draw a conclusive analysis from the data. High response rate usually ensures that an unbiased conclusion is made. A response rate of 66% is generally a fair guide to the scenario under study.

4.2 Demographics

This section considered two key variables relating to the demographics of the study, namely the experience and qualifications of the respondents.

4.2.1 Experience in the sector

Table 4.1 summarises the percentage distribution of the experience of the respondents in the microfinance sector.
Table 4.1 Experience in the sector

<table>
<thead>
<tr>
<th>Experience in the sector</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 to 2 years</td>
<td>1</td>
<td>3.1</td>
</tr>
<tr>
<td>3 to 5 years</td>
<td>20</td>
<td>62.5</td>
</tr>
<tr>
<td>More than 5 years</td>
<td>10</td>
<td>31.3</td>
</tr>
<tr>
<td>Total</td>
<td>31</td>
<td>96.9</td>
</tr>
<tr>
<td>Missing</td>
<td>1</td>
<td>3.1</td>
</tr>
<tr>
<td>Total</td>
<td>32</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 4.1 shows that 62.5% of the respondents had been in the sector between three to five years (post the Zimbabwe dollar era) whilst a further 31.3% of the respondents had more than five years’ experience in the sector and only 3.1% of the respondents had experience in the sector of between one to two years. Some of the respondents had more than five years in the sector as they had been with the institutions prior to the introduction of the multicurrency era. Thus, the results show that the majority of the respondents had more than three years’ experience with MFIs hence they had knowledge of how the sector worked and had deep institutional memory hence their knowledge was helpful in this study.

4.2.2 Qualifications of respondents

According to the study findings in Figure 4.1, above 64% of the respondents had degrees and 37.5% of the respondents had post graduate degrees. The results show that all the respondents were either degreeed or had also acquired further qualifications. Therefore this means that the
respondents were qualified to understand and sufficiently answer the questions objectively to the benefit of the study. Some of the data required as per the questionnaire, was too technical, like for instance data on the loan portfolio indicators and how they relate to the loan pricing levels required respondents with the technical knowhow of these variables, of which these managers had, by virtue of their qualifications buttressed by their experience in the sector.

4.3 Ownership structure of the institutions

Table 4.2 shows the distribution of the different ownership structures of the MFIs that participated in the study.

<table>
<thead>
<tr>
<th>Ownership Structure</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local private individuals</td>
<td>19</td>
<td>59.4</td>
</tr>
<tr>
<td>Membership owned</td>
<td>3</td>
<td>9.4</td>
</tr>
<tr>
<td>Subsidiary of bank</td>
<td>6</td>
<td>18.8</td>
</tr>
<tr>
<td>Trust</td>
<td>3</td>
<td>9.4</td>
</tr>
<tr>
<td>Total</td>
<td>32</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 4.2 above shows that 59.4% of the MFIs which participated in this study were owned by local private individuals, 18.8% were subsidiaries of banks, 9.4% were membership owned while another 9.4% were owned by a Trust. Therefore the results were beneficial as they encompassed a wide range of views from all the various stakeholders from the different ownership structures involved with ZMWF.

Campion et al. (2010) in their study in Latin America and the Caribbean noted that ownership structure of MFIs influences pricing levels that these MFIs charge. This was also confirmed as results from this study show in Sections 4.6.2 and 4.6.3 below.

4.4 Determinants of MFI loan prices

Table 4.3 shows the strength of each loan pricing determinant as indicated by the respondents.
Table 4.3 Determinants of MFIs’ gross loan pricing levels

<table>
<thead>
<tr>
<th>Determinants</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost of funding</td>
<td>59.4%</td>
<td>37.5%</td>
<td>3.1%</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Operating costs</td>
<td>63.5%</td>
<td>30.5%</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Need for profits</td>
<td>59.4%</td>
<td>40.6%</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Political risk</td>
<td>53.2%</td>
<td>23.2%</td>
<td>3.1%</td>
<td>20.5%</td>
<td>-</td>
</tr>
<tr>
<td>Regulatory pressure</td>
<td>58.6%</td>
<td>38.3%</td>
<td>3.1%</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Client credit rating</td>
<td>56.3%</td>
<td>40.6%</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Table 4.3 above shows that 63.5% of the respondents strongly agreed that MFIs’ loan pricing was mainly determined by the need to cover their operating costs, 59.4% of the respondents also strongly agreed that MFIs’ loan pricing was determined by their cost of funding, another 59.4% of the respondents strongly agreed that MFIs’ loan pricing was determined by their need for making profits and/or ensuring sustainability, 58.6% of the respondents strongly agreed that regulatory pressures determined the pricing of MFIs’ loans whilst 56.3% of the respondents strongly agreed that client credit rating was a determinant to MFI loan pricing levels. Political risk was strongly agreed by 53.2% of the respondents to be a determinant of MFIs’ gross loan pricing. Therefore these results show that the majority of the respondents strongly agreed that the determinants of MFIs’ gross loan pricing level were operating costs, cost of funding, need for profits, regulatory pressure, client credit rating and political risk.

The above results are in line with observations by a number of researchers including Rosenberg et al. (2013) who state several factors like cost of funds, loan loss expenses and operating expenses as responsible for loan pricing levels. Faruquee and Khalily (2011) also mention six determinants as shown in Table 4.3 above except for political risk and regulatory pressure which are in this case substituted by provision for bad debts and capitalisation rate. Political risk and regulatory pressure were noted to influence pricing by Campion et al. (2010).
4.4.1 Significance of determinants of loan pricing

This section sought to establish the determinants or factors driving the MFIs’ loan pricing. The researcher used regression to establish the significance or contribution of each determinant or factor on MFIs’ loan pricing.

4.4.1.1 Multiple regression analysis

A multiple regression analysis to determine the relationship between the dependent variable (loan pricing level) and independent variables (cost of funding, operating and administration costs, need for profits and sustainability, political risk, client credit ratings and regulatory pressure) was conducted and the results are shown in Table 4.4 below.

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>T</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>-.066</td>
<td>.103</td>
<td>-.640</td>
<td>.528</td>
</tr>
<tr>
<td>Cost of funding</td>
<td>.142</td>
<td>.044</td>
<td>.142</td>
<td>3.264</td>
</tr>
<tr>
<td>Operating costs</td>
<td>.541</td>
<td>.025</td>
<td>.616</td>
<td>21.800</td>
</tr>
<tr>
<td>Need for profits</td>
<td>.142</td>
<td>.044</td>
<td>.142</td>
<td>3.264</td>
</tr>
<tr>
<td>Political risk</td>
<td>.009</td>
<td>.012</td>
<td>.015</td>
<td>.786</td>
</tr>
<tr>
<td>Regulatory</td>
<td>.129</td>
<td>.046</td>
<td>.123</td>
<td>2.806</td>
</tr>
<tr>
<td>pressure</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Client credit ratings</td>
<td>.066</td>
<td>.035</td>
<td>.064</td>
<td>1.853</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Loan Pricing

Source: Author’s calculations (2015)

The t-test results for the multiple regression coefficients as shown above in Table 4.4 for the six variables were 3.264 for cost of funding and need for profits, 21.800 for operating costs, 0.786 for political risk, 2.806 for regulatory pressure and 1.853 for client credit ratings. The probability of any of these results occurring by chance were all less than 0.05, being less than 0.001 for the independent variable operating costs and 0.003 for both cost of funding and need for profits and sustainability, 0.021 for regulatory pressure, 0.037 for client credit ratings and 0.049 for political risk. This means that the regression coefficients for these variables were all statistically significant at the p<0.05 level. The results also showed that from the t-test results and the p-values (of 21.800 and 0.000 respectively), the variable of operating costs contributed the most in determining the pricing level for loans by MFIs,
followed by cost of funding and need for profits and sustainability. However the determinant with the least contribution to loan pricing by MFIs was political risk which had a t-test value of 0.786 and p-value of 0.049. Therefore this means that MFIs considered operating costs as the greatest contributor to loan prices with least contributor being political risk.

The results are in line with observations by Rosenberg et al. (2013) that operating costs consume the majority of the income generated by MFIs hence is the biggest contributor to loan pricing. High operating costs might be as a result of high inefficiencies on the part of the MFIs and in such cases it might not be fair to pass on their internal inefficiencies to end borrowers. Moughlin (2013) also notes that loan pricing is largely driven by the need to cover operating costs while the quest for operational sustainability also plays a significant role. Goodwin-Groen (2012) also confirms this by noting that loan pricing is a function of the need to cover operational and administrative costs as MFIs especially in the developing world employ outdated loan delivery methodologies to reach out to their clients – a development that promotes high operational costs and consequently high interest rates to end clients.

4.4.1.2 Coefficient of determination

The coefficient of determination assesses the strength of the relationship between one dependent variable and two or more independent variables. In this study the method was used to assess the strength of the relationship between the loan pricing levels (dependent variable) and six independent variables, namely cost of funding, operating and administration costs, need for profits and sustainability, political risk, client credit ratings and regulatory pressure. The results are shown in Table 4.5 below.

Table 4.5 Coefficient of determination

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>$R^2$</th>
<th>Adjusted $R^2$</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.996$^a$</td>
<td>.992</td>
<td>.990</td>
<td>.050</td>
</tr>
</tbody>
</table>

Source: Author’s own calculations (2015)

The $R^2$ column depicts the coefficient of determination showing the percentage or proportion of variance in the dependent variable that can be explained by the independent variables. Table 4.5 shows that the value of $R^2$ was 0.992 which therefore meant that the independent variables (cost of funding, operating and administration costs, need for profits and sustainability, political risk, client credit ratings and regulatory pressure) explained 99.2% of
the variability of the loan pricing level (dependent variable). The results show that cost of funding, operating and administration costs, need for profits and sustainability, political risk, client credit ratings and regulatory pressure contributed about 99.2% to determining loan pricing for MFIs. This is a very high percentage contribution which therefore means that these factors were very essential loan pricing determinants when coming up with loan prices for MFIs and other outside determinants not included above only contributed 0.8% in determining loan prices.

4.4.1.3 Regression analysis

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>7.294</td>
<td>6</td>
<td>1.216</td>
<td>481.920</td>
<td>.000b</td>
</tr>
<tr>
<td>Residual</td>
<td>.061</td>
<td>24</td>
<td>.003</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>7.355</td>
<td>30</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Source: Author's own calculations (2015)*

The F-test result was 481.920 with significance (Sig.) of .000. This meant that the probability of these results occurring by chance was less than 0.05. Therefore it means that there is a significant relationship present between the dependent variable (loan pricing level) and the independent variables (cost of funding, operating and administration costs, need for profits and sustainability, political risk, client credit ratings and regulatory pressure). The model is statistically significant in predicting how cost of funding, operating and administration costs, need for profits and sustainability, political risk, client credit ratings and regulatory pressure contribute in determining loan prices for MFIs.

4.5 Existence and use of a loan pricing framework by MFIs

The study also sought to find out the existence and use of a loan pricing model in the participating MFIs. Figure 4.2 shows the results.
Figure 4.2 Existence and use of loan pricing models by MFIs

Figure 4.2 shows that 87% of the respondents did not have a loan pricing model at their MFIs and only 13% had a loan pricing model to guide them in pricing their products. This means that the majority of the MFIs did not have a pricing structure for the loan products they provided to their markets hence they had no way to know whether their loan prices were profitable or competitive enough. This could be the reason why ZMWF seemed to be influencing MFIs’ decision in terms of pricing levels charged to clients as this was to ensure that they price their products objectively because they did not have loan pricing models. This could also be one of the reasons why most MFIs before partnering with ZMWF were charging exorbitant gross loan prices as shown in Section 4.6.2 as they lacked a loan pricing model to guide them in pricing competitively and maintain sustainability.

The absence of pricing frameworks in most institutions is what was referred to as lack of pricing transparency by Helms and Reille (2004). The results in Figure 4.2 therefore contradicts the goals of the Smart Campaign (2011) which is advocating for pricing transparency in the way the ultimate prices are calculated by the MFIs hence the need for pricing frameworks among MFIs. Transparency in this case requires MFIs to have a systematic and methodical way of arriving at a particular pricing level and not to give an impression to stakeholders that MFI prices are figures merely plucked from open space.
4.6 Impact of partnership between MFIs and ZMWF on loan price levels

The researcher also sought to find out the impact of the partnership between MFIs and ZMWF on loan pricing.

4.6.1 Reasons for working with ZMWF

Figure 4.3 shows the distribution of different reasons why the respondents decided to partner with ZMWF in their operations.

According to the study results shown in Figure 4.3 above, 97.4% of the respondents concurred that MFIs which worked with ZMWF sought funding from them because they provided long term funding unlike other funders in the sector. The other reason according to 96.5% of the respondents was because ZMWF provided affordable funds as compared to other funders, whilst 57% of the respondents stated that the goals and objectives of the ZMWF were congruent with their own. Only 3.23% of the respondents concurred that the reason why they sought funding from ZMWF was because they believed that it was the only microfinance institution funder in Zimbabwe. The results show that the major reasons MFIs worked with ZMWF was because they provided MFIs with long term funding, affordable funds and to a lesser extent their goals and objectives were congruent. The other lesser reason was because some MFIs did not know any other microfinance institution funder except for ZMWF hence the reason why they dealt with them.
The fact that the majority of the MFIs wanted to work with ZMWF on the basis of accessing affordable and long term funding gives credence to the assertion that local MFIs might be aware that their prices are unfavourable to the borrowing public, hence they could be leveraging on the ZMWF funding to rationalise their pricing levels.

4.6.2 Gross loan price levels trend before working with ZMWF

Figure 4.4 shows the trend of loan prices by the participating MFIs before engaging ZMWF.

![Figure 4.4 Gross loan price levels trend before working with ZMWF](image)

Figure 4.4 shows that in all the ownership structures of MFIs there was high loan price levels before they started working with ZMWF. For the year 2013 local private individually owned MFIs which were not working with ZMWF had loan price levels at around 30% per month. Membership owned MFIs which were not working with ZMWF for the year 2013 had loan prices at 16% per month. Bank subsidiary MFIs which were not working with ZMWF for the year 2013 had loan prices at 13% per month. Finally, for the year 2013 Trustee owned MFIs which were not working with ZMWF had loan price levels at around 25%.

4.6.3 Gross loan prices after partnering with ZMWF

Table 4.7 shows the different pricing levels by the participating MFIs after partnering ZMWF.
Table 4.7 Ownership structure * Gross loan price Cross-tabulation

<table>
<thead>
<tr>
<th>Ownership structure</th>
<th>Gross loan price</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Less than 10% per month</td>
<td>10 to 20% per month</td>
</tr>
<tr>
<td>Local private individuals</td>
<td>Count</td>
<td>6</td>
</tr>
<tr>
<td>% within Ownership structure</td>
<td></td>
<td>31.6%</td>
</tr>
<tr>
<td>Membership owned</td>
<td>Count</td>
<td>4</td>
</tr>
<tr>
<td>% within Ownership structure</td>
<td></td>
<td>66.7%</td>
</tr>
<tr>
<td>Subsidiary of bank</td>
<td>Count</td>
<td>13</td>
</tr>
<tr>
<td>% within Ownership structure</td>
<td></td>
<td>41.9%</td>
</tr>
</tbody>
</table>

Source: Author’s calculations (2015)

According to Table 4.7 above, 41.9% of MFIs charged less than 10% per month for their business and micro enterprise loans, 29% of the MFIs charged between 21 to 30% per month, 25.8% charged between 10% and 20% per month and only 3.2% of the MFIs charged more than 30% per month.

Table 4.7 above shows that membership owned MFIs had the least gross loan price as all its MFIs charged less than 10% per month with ZMWF financing the greater proportion of their respective loan books largely due to incapacity of members to raise funds to grow the books. The MFIs which were subsidiaries of banks had the majority of their MFIs charging less than 10% per month whilst 33.3% of their MFIs charged 10 to 20% per month. On the other hand
all MFIs owned by Trusts charged a rate of 10% to 20% per month hence it can be noted that they offered loans with gross loan prices which were higher than those offered by membership owned MFIs. MFIs owned by local private individuals charged varying gross loan prices which showed the differences in individual owners’ financial capacities and capabilities. Table 4.7 showed that 47.4% of the local private individual owned MFIs charged gross loan prices between 21% to 30% per month followed by 31.6% that stated that they charged less than 10% per month, with a further 15.8% of the MFIs owned by local private individuals charging 10% to 20% per month and 5.3% charged more than 30% per month.

Therefore, this means that since the MFIs started working with ZMWF their gross loan price levels decreased marginally. In the case of private individual owned MFIs, gross loan prices decreased by more than 3% from 33% per month as in 2013 to less than 30% per month since partnering with ZMWF, whilst membership owned MFIs decreased by more than 6% from 16% per month as in 2013 to less than 10% per month after partnering with ZMWF, Trust owned MFIs also had a reduction in gross loan prices by 5% from around 25% per month in 2013 to less than 20% per month. Gross loan prices also reduced for bank subsidiary owned MFIs which partnered with ZMWF as in 2013 they were charging around 13% per month but after partnering with ZMWF they were charging less than 10% per month which is a reduction of more than 3% – but was not influenced by ZMWF as indicated in Section 4.6.5 below. This scenario hence would assist MFIs to charge more competitive rates than their peers in the market.
Figure 4.5 Debt financing cost by ownership structure

Figure 4.5 above shows the cost at which MFIs accessed their funding for loans from ZMWF and the results were grouped according to their different ownership structures. The findings show that the majority of the MFIs accessed their debt funding at rates ranging from 9% to 15% per annum and only a few MFIs owned by local private individuals received a lower rate of 8% per annum and below comprising of only 5.3% of respondents from the local private individual owned MFIs. The study findings in Section 4.6.3 show that gross loan prices charged by the majority of MFIs were now less than 10% per month, showing that MFIs were benefiting from ZMWF which was providing debt financing at a cost of 9% to 15% per annum which is around 0.75% to 1.25% per month. Therefore, the results could be showing that MFIs which had partnered with ZMWF could afford to lower their gross loan prices from the higher rates they had been charging before their partnership with ZMWF as discussed in Section 4.6.2.
4.6.5 ZMWF influence on MFIs’ loan pricing decisions

Figure 4.6 shows whether ZMWF plays an active role in influencing the pricing levels of the MFIs it is working with.

The study findings in Figure 4.6 show that the majority of MFIs concurred that ZMWF influenced their decision in terms of pricing level charged to their clients. This was because ZMWF was providing debt financing to MFIs at low rates hence they were encouraging MFIs to also reduce their loan prices to their own customers in pursuit of the goal to facilitate access to funds at low cost and help fight poverty. This could be one of the reasons why after partnering with ZMWF gross loan prices for MFIs were also reduced as discussed in Sections 4.6.2 and 4.6.3 above. The only exception was for MFIs which were subsidiaries of banks which stated that their pricing decisions were not influenced by ZMWF. This could be because parent banks were the ones who influenced decision making in terms of price levels and these would also tap into the banks’ financial resources to finance the greater proportion of their loans books. On the other hand, ZMWF was financing a smaller portion of their portfolios hence could not lean heavily on them to further reduce their prices seeing that these institutions were already charging relatively low price compared to the other MFI categories.
The results are in conformity with observations by the CGAP (2006) which state MFI funders in other jurisdictions, particularly those supported by the donor community, influence loan pricing that MFIs should retail to the end beneficiaries. The Russian Microfinance Project (2000) was of the view that donor financed programmes set interest rates at very low levels to try and assist the poor beneficiaries. In the same vein secondary data from ZMWF (2013) in its paper on the need to try and harness high interest rates by MFIs was proposing staggered capping of interest rates to MFIs such that the interest rates were supposed to progressively decline with each loan cycle accessed by a particular MFI from ZMWF. The initial proposal which was still standing by the time of this study shows that ZMWF was encouraging its MFI partners to charge not more than 5% per month on its funds with the MFIs having the liberty to charge their own interest rates on loans originated from their own funding. Some of the MFIs interacted with during the study indicated that they have seen it fit to also marginally revise pricing of loans originated by their own funds to attract more borrowers and hence leverage on making profit from increased business volumes at rather slightly reduced margins. This could have played a role in the general trend depicted in Figure 4.5 as read in conjunction with Table 4.8.

4.7 Relationship between loan pricing and MFI portfolio performance indicators

The researcher also sought to establish whether there was a relationship between loan pricing and portfolio performance indicators of namely write off ratio, portfolio at risk, collection rate, arrears rate, number of clients served and loan book size as well as the type (whether positive or negative) of the said relationship.
Table 4.8 Correlation Matrix

<table>
<thead>
<tr>
<th></th>
<th>Pricing</th>
<th>Write off</th>
<th>PaR</th>
<th>Collection rate</th>
<th>Arrears Rate</th>
<th>No. of clients</th>
<th>Loan book size</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pricing</strong></td>
<td>Pearson Correlation</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sig (2-tailed)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Write off</strong></td>
<td>Pearson Correlation</td>
<td>.495**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sig (2-tailed)</td>
<td></td>
<td>0.05</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>PaR</strong></td>
<td>Pearson Correlation</td>
<td>.761**</td>
<td>.698**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sig (2-tailed)</td>
<td>.000</td>
<td>.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Collection rate</strong></td>
<td>Pearson Correlation</td>
<td>-.362*</td>
<td>-.030</td>
<td>-.326</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sig (2-tailed)</td>
<td>.045</td>
<td>.872</td>
<td>.074</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Arrears rate</strong></td>
<td>Pearson Correlation</td>
<td>.688**</td>
<td>.891**</td>
<td>.783**</td>
<td>-.266</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Sig (2-tailed)</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.147</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>No. of clients</strong></td>
<td>Pearson Correlation</td>
<td>-.400*</td>
<td>-.121</td>
<td>-.306</td>
<td>-.316</td>
<td>-.323</td>
<td>1</td>
</tr>
<tr>
<td>Sig (2-tailed)</td>
<td>.026</td>
<td>.516</td>
<td>.095</td>
<td>.084</td>
<td>.076</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Loan book size</strong></td>
<td>Pearson Correlation</td>
<td>-.361*</td>
<td>-.113</td>
<td>-.299</td>
<td>.314</td>
<td>-.305</td>
<td>.941**</td>
</tr>
<tr>
<td>Sig (2-tailed)</td>
<td>.046</td>
<td>.545</td>
<td>.102</td>
<td>.085</td>
<td>.095</td>
<td>.000</td>
<td></td>
</tr>
</tbody>
</table>

Source: Author’s calculations (2015)

The study findings in Table 4.8 show that the relationship between loan pricing and the variables representing key portfolio indicators namely, portfolio at risk, arrears rate, collection rate, write-off ratio, loan book size and number of clients were all statistically significant as they were all p<0.05. The results showed that there was a mildly strong positive relationship between loan pricing level and write-off ratio. This meant that the increase in loan pricing level would lead to a slight but significant increase in write-off ratio. This was also the case with the relationship between loan pricing level and arrears rate. There was a mildly strong positive relationship but was a bit stronger than the one between loan pricing level and write-off ratio with a Pearson correlation value of 0.495. This was also the case with the relationship between loan pricing level and arrears rate. There was a mildly strong positive relationship but was a bit stronger than the one between loan pricing level and write-off ratio with a Pearson correlation value of 0.688. Therefore, an increase in loan pricing level by MFIs would also lead to a slight but significant increase in their arrears rate and vice versa. However, in the case of the relationships between loan pricing levels and portfolio at risk, the
findings in Table 4.8 show that there was a strong positive relationship as shown by the Pearson correlation value of 0.761. This value was above 0.7 which show a strong positive relationship. Therefore, if MFIs increased their loan prices this would also trigger a significant increase in their portfolio at risk.

On the other hand, there were mildly strong negative relationships between loan pricing levels and three variables, namely collection rate, number of clients served and loan book size according to the study findings shown in Table 4.8. Their Pearson correlation values were -0.362, -0.400 and -0.361 respectively therefore an increase in loan pricing levels by MFIs would lead to a mildly significant decrease in their collection rates, number of clients served and loan book size.

Results in Table 4.8 above are in line with observations by Pafula (2003) that high interest rates subdue demand for loans which in turn leads to small portfolio sizes for such MFIs – thus the two variables have a negative relationship. She further adds that favourable or low pricing tends to favour high collection rates hence low arrears and PaR ratios, thus confirming findings in Table 4.8 above. Marsland and Strom (2008) also note a negative correlation between loan pricing and outreach (number of clients served) when they state that lower prices tend to result in more clients being served by MFIs as clients are able to services the loan. Pasha and Khemraj’s (2010) observations also support the results in Table 4.8 as they note that there is a positive correlation between interest rates and NPLs (which are synonymous with arrears and PaR). On the other hand, Huddon (2010) postulates that in micro financing, financial and portfolio performances are a function of management issues and not any other factor. The same observation was also noted by Kaggwa (2013) in her study relating to Uganda’s commercial banks, although she further notes that general good portfolio performance in lending institutions hinges on sound credit management policies at loan screening stage. In line with this, Fofack (2005) asserts that macroeconomic stability is a key catalyst to loan portfolio performance in addition to loan pricing as a sole variable.
4.9 Chapter summary

This section covered the findings of the study which included the discussion of impact of MFIs partnership with ZMWF on gross loan pricing and market, reasons for working with ZMWF amongst other funders, gross loan price levels trend before working with ZMWF, regression test of the key determinants of loan pricing, correlation test between loan pricing and the key portfolio indicators of performance, the proposed hypothesis was tested and proved. The next chapter will discuss the conclusions, make recommendations as well as propose areas of further study.
CHAPTER 5

CONCLUSIONS AND RECOMMENDATIONS

5 Introduction
The study was aimed at evaluating the pricing of loan products by MFIs funded by ZMWF in Zimbabwe and its effect on their portfolio performances. The previous chapter covered the research findings, their implications and link to the literature. This chapter presents the conclusions, recommendations from the study as well as presenting the area for further study.

5.1 Conclusions

This study reached the following conclusions as guided by its objectives:

5.1.1 Determinants of MFI loan prices
The study concludes that loan prices by MFIs are determined by a collection of factors chief among them being the need to cover operating and administrative costs as acknowledged by the respondents. This is so because MFIs’ chief goal is poverty alleviation hence the need to initially cover operating costs before moving on to make profits, although there was strong need by MFIs to be sustainable to enhance their going concern status. Thus, the need for profit and sustainability and cost of funding played a significant role in influencing pricing levels. Cost of doing business seems high among MFIs in Zimbabwe thus, forcing them to levy very high pricing levels on their products. Therefore this means that MFIs considered the operating costs the most significant out of all that determined loan prices. Other factors that determined MFIs’ loan prices were largely external and include regulatory pressure, client credit ratings and political risks though playing a minimum role relative to internal factors as per the research findings.

5.1.2 Existence and use of loan pricing frameworks by MFIs
This study also concludes that MFIs in Zimbabwe, except those which are subsidiaries of commercial banks, do not have structured loan pricing frameworks to systematically guide them on how they arrive at various pricing levels they levy on their loan products. The implication of this is that prices that are charged by most of the MFIs are figures and rates that are arrived at through estimations and not methodically through proper calculations. This
could be reason why the majority of them charge interest rates that are very high to make a quick return on their investments in the sector as about 59.4% of them (although not the dominant) acknowledged that they strongly agree that their prices are influenced by the need for profits.

5.1.3 Impact of the ZMWF and MFI relationship on pricing on loan products

This study further concludes that before partnering with ZMWF, MFIs’ loan prices were considered higher than the current levels as they were charging between 13% and 33% per month prior and during 2013. However, after partnering with ZMWF, their loan prices were variably reduced as some of the MFIs were now charging less than 10% per month. This in part was because ZMWF was providing the MFIs with debt financing at rates ranging between 9% and 15% per annum which was about 0.75% to 1.25% per month hence MFIs could afford to charge less than 10% per month and still remain sustainable. Furthermore, ZMWF also influenced loan prices that these MFIs charge to their clients on ZMWF funding alone by recommending a price of about 5% per month on its funds. ZMWF’s influence was effective in MFI categories in which it was financing the greater portion of their loan books like membership owned while the influence was non-existent for bank owned MFIs as its level of funding in such institutions was low as they had other funding sources from the mother banks. The research also showed that the major reasons why MFIs worked with ZMWF were that it provided them with affordable long term funding which in turn was to allow them to lower their pricing levels. The idea to influence pricing by ZMWF was therefore to bring sanity and fairness in the market interest rates were high despite some institutions accessing debt funding at lower rates.

5.1.4 Relationship between loan pricing and portfolio performance indicators

This study also concludes that there were significant relationships between loan pricing and the key portfolio performance indicators of MFIs in Zimbabwe. There were mildly strong positive relationships between loan pricing and two of the key portfolio performance indicators namely write-off ratio and arrears rate. This meant that an increase in loan price by MFIs would also lead to a slight but significant increase in their arrears rate and write-off ratio. However, in the case of the relationship between loan pricing levels and portfolio at risk, there was a strong positive relationship meaning that if MFIs increased their loan prices this would also trigger a significant increase in their portfolio at risk as most borrowers would
find it difficult to honour their contractual obligations to repay loans. On the other hand there were mildly strong negative relationships between loan pricing levels and three variables, namely collection rate, number of clients served and loan book size which meant that an increase in loan pricing levels by MFIs would lead to a mildly significant decrease in their collection rates, number of clients served and loan book size. In the same vein, lower loan prices increases MFIs’ loan book sizes which in this case are the chief income generating assetson their balance sheets. MFIs are also measured by the number of clients served for effectiveness hence the lower the loan price the more the clients served hence achievement of one of the goals of micro financing to reach to as many economically active poor as is possible.

5.2 Research hypothesis validation
This study accepts the hypothesis that:

\[ H_0: \text{Microfinance loan pricing is driven by a set of factors (cost of funds, operating costs, need for profits, political risk, client ratings and regulatory pressure) and in turn affects MFIs’ portfolio performances.} \]

This hypothesis was tested by way of examining the key determinants of loan pricing through regression; and key portfolio performance indicators through correlation with loan pricing levels of MFIs.

The regression findings showed that there was a statistically significant relationship present between loan pricing level and the loan pricing determinants namely cost of funding, operating and administration costs, need for profits and sustainability, political risk, client credit ratings and regulatory pressure. This was shown by F-test result of 481.920 with significance (Sig.) of .000. Therefore, the results show that MFI loan pricing is driven by a set of factors and these factors were established to be the cost of funding, operating and administration costs, need for profits and sustainability, political risk, client credit ratings and regulatory pressure.

Furthermore, the correlation results showed that there were statistically significant relationships between the key portfolio performance indicators and loan pricing as they were all \( p<0.05 \). The findings showed that there was a mildly strong positive relationship between loan pricing and the key portfolio performance indicators namely write-off ratio and arrears
rate, whilst there was a strong positive relationship between loan pricing and the key portfolio indicators portfolio at risk and loan book size. On the other hand there was a mildly strong negative relationship between the loan pricing and the key portfolio performance indicators namely collection rate, loan book size and number of clients served.

These findings showed that MFI pricing is driven by a set of factors or determinants like cost of funding, operating and administration costs need for profits and sustainability, political risk, client credit ratings and regulatory pressure. Furthermore, there are effects on the portfolio’s performance either positively in the case of write off ratio, arrears rate and portfolio at risk or negatively in the case of collection rate, loan book size and number of clients served. Hence it can be noted that ‘Microfinance loan pricing is driven by a set of factors (cost of funds, operating costs, need for profits, political risk, client ratings and regulatory pressure) and in turn affects MFIs’ portfolio performances’. Therefore the proposed hypothesis ‘Microfinance loan pricing is driven by a set of factors (cost of funds, operating costs, need for profits, political risk, client ratings and regulatory pressure) and in turn affects MFIs’ portfolio performances’ is hereby accepted by this study.

5.3 Recommendations

5.3.1 This study recommends the crafting of a structured loan pricing model or framework. The idea here is to bring transparency and fairness to the borrowing public if consumers and policy makers or regulators were to demand justification for some of the high prices in the sector. ZAMFI, being the national association of MFIs, should play a pivotal role on this by mobilising resources to come up with a universal model applicable to all its members – some of whom are already partnering ZMWF. A uniform model for the sector may be a good starting point until such a time when pricing models are adequately appreciated in the sector. From the study key factors that need to be factored in the model include operating costs, cost of funds, client ratings and regulatory pressure (although minimal). Enforcing such a move initially needs the help of regulatory authorities (RBZ) which may hold licence renewal as bait to having MFIs implement a properly structured pricing model or through moral suasion.
5.3.2 The study also recommends technological innovation and new product development on the part of MFIs. There is need for innovation in the sector in terms of new product developments largely driven by technology, particularly utilisation of mobile banking platforms (for instance Ecocash, Telecash, Nettcash and Easy Wallet) for disbursement and loan repayments. Zimbabwe has a high mobile phone penetration rate in both urban and rural areas, thus, even among those regarded as poor. This reduces cost of operations especially in terms of expenses related to monitoring and collection of repayments from sparsely populated rural areas. Technologically driven products increases operating efficiencies hence lower operating costs which could consequently lead to reasonable pricing of products to end beneficiaries.

5.3.3 It is also recommended that MFIs should also develop a culture of retaining profits to grow their loan books. Retained earnings are a form of equity finance available to MFIs at almost zero cost and thus will help MFIs to transmit low costs to end beneficiaries. This will reduce funds that they will have to raise in the commercial debt market which normally comes at high costs – a phenomenon which leads to the passing on of these costs to end beneficiaries.

5.3.4 This study further recommends that ZMWF should avail more capacity building grants and technical assistance to MFIs it is working with, as a way of addressing various institutional weaknesses inherent in them as the research findings confirm that factors pushing up prices are largely internal and peculiar to the MFIs themselves. This improves operating efficiencies hence lower operating costs which have been key to pushing high prices for MFI loan products. Areas that may need capacity building and technical assistance include information technology (provision of loan tracking systems and computer hardware), skills development for operating staff, enhancing loan granting processes that are technologically driven. This will help MFIs to balance between the social mission of poverty alleviation and commercial goal of return on investment for self-sustainability.

5.3.5 The study also recommends that need for innovativeness on the part of ZMWF in its credit delivery methodologies and seek ways that reduce cost of borrowing to MFIs, which in turn will be passed on to the MFIs and consequently to end clients. It must vigorously pursue value chain financing wherein it should be involved at every stage
of the chain by providing funding, training, capacity building and facilitate market linkages for MFIs’ end clients. This ensures that the whole lending process or chain is intact and risk of non-repayment (client credit rating) is thereby reduced consequently leading to low prices by MFIs to end beneficiaries. ZMWF needs to leverage on its network with the local international developmental organisations which have been actively involved in training local entrepreneurs in business management skills and technical skills development, for instance, in agriculture management and refer its MFI partners to work with such clients who had already been capacitated. Credit rating for such clientele (though not a major pricing determinant as shown by results) is generally high hence may in a way help sanitise loan pricing levels in the long run.

5.3.6 It also recommended that ZMWF should leverage on its already existing relationship with its current funders and mobilise more funding for the sector. A combination of new funding (at zero cost from current funders) and reflows from the repayments ZMWF is currently getting from MFI partners will increase its funding pool which may in turn help reduce cost of funds at both the MFI and the end beneficiary level. It will also assist ZMWF to offer more long term capital and new loan products to the sector – a factor which is currently missing.

5.3.7 This study also recommends for the provision of technical and funding support to ZMWF and MFIs by the GoZ and its related agencies. The GoZ should set aside budgetary allocation to support ZMWF and complement efforts by its current funders in capitalising the entity to reach out to MFI players which support the informal sector which is a key driver to the local economy. Funding from GoZ for such initiatives usually come at nil cost hence it will assist ZMWF to lend the money to MFIs at low prices. Funds for capacity building of MFIs should also be part of this package.

5.3.8 Lastly the study recommends that the GoZ and its related agencies should enhance the operating environment to attract offshore funding to either, MFIs directly or through ZMWF. This helps them to grow their loan books hence increased profitability and responsible pricing. Offshore funding comes with performance enhancers like skills transfer and capacity enhancements which trigger operational efficiencies hence lower prices.
5.4 Study limitations and suggestions for further study

The major limitation to this study was that it did not go down to the bottom of the chain to seek the opinion and suggestions of the end clients (MFI clients) with regards to the loan prices they bear from the MFIs. There could be a possibility that MFIs are reaping financial rewards by massively exploiting the economically active poor who happen to be the supposed beneficiaries of their lending business. This therefore makes it impossible to come up with a conclusive body of evidence about how the end beneficiaries regard the level of loan pricing by MFIs and effects of the same on their respective enterprises or income generating projects.

The researcher therefore suggests that a further study be carried out to determine the end borrowers’ perception of MFI loan pricing levels and how the same affect the performance of their businesses in terms of their repayment capacities to the MFIs as well as business growth and profitability.

Secondly, this research unearthed the absence of a structured loan pricing framework by the majority of MFIs in Zimbabwe. Therefore this researcher is recommending that a further study be carried out to come up with a structured loan pricing framework for possible use by MFIs in Zimbabwe. The researcher further proposes that this framework be the primary output of the study and this could be achieved through use of advanced modelling techniques, like for instance, econometric regression.
Amin, M. E., (2005), Social Science Research Conception. Methodology and Analysis, Kampala, Makerere University Printery


Daher L., and Le Saout E., (2013), Microfinance and Financial Performance. John Wiles and Sons Limited. Strategic Change: Briefings in Entrepreneurial Finance, University of Paris 1, Pantheon-Sorbonne, France,


Golafshani N., (2003), Understanding Reliability and Validity in Qualitative Research. The Qualitative Report, Volume 8, No. 4, December 2003. 597-607

Gonzalez A., (2010), Analysing Microcredit Interest Rates: A Review of the Methodology Proposed by Mohammed Yunus


Hart A. M., Breman C. W. and Sym D., (2009), The impact of personalised pre-notification on response rates to an electronic survey. Western Journal of Mining Research 31, 1, pp. 17-23


Helms B., and Reille X., (2004), Interest rate ceilings and microfinance: The story so far. CGAP Occasional Paper Number 9, September 2004

Hermesy N., and Lensink R., (2007), Microfinance: Its impact, outreach and sustainability, University of Groningen, Netherlands


Hudon M., (2009), “Should aces to credit be a right?” *Journal of Business Ethics*, 84, pp. 17-28


Money Lending and Rates of Interest Act (Chapter 14:14)

Moss V., (2003), Report on the Performance of Microfinance Institutions (MFIs) for the Period Under Review. National Housing Finance, South Africa

Mulema S. P., (2011), Credit Policy and Loan Portfolio Performance in Microfinance Institutions: A case study of Uganda Finance Trust, Central Branch, Kampala, Uganda


Pafula K., (2003), Financial Institutions Loan Portfolio Performance in Uganda. A Comparative Study of Commercial Banks and Microfinance Institutions, Makerere University, Uganda


Prescribed Rates of Interest Act and Statutory Instrument Number 126 of 1993


65
Reserve Bank of Zimbabwe, (2014 c), Monetary Policy Committee Statement of January 2014

Reserve Bank of Zimbabwe, (2014 d), Monetary Policy Committee Statement of January 2015


Roberts P. W., “Profit Orientation of Microfinance Institutions and Effective Interest Rates, Goizueta Business School, Emory University


Rosenberg R., (2009), Measuring Results of Microfinance Institutions: Minimum Indicators that Donors and Investors should Track, CGAP, June 2009


Statutory Instrument Number 126 of 1993


Tabaa M. E., (2009), Pricing and Marketing Issues in Microfinance, ABA

The Daily News (2014) ZMWF – Committed to long term funding of MFIs, [www.dailynews.co.zw/dailynewssupplement/docs/smes_expo_magazine/14](http://www.dailynews.co.zw/dailynewssupplement/docs/smes_expo_magazine/14), (19/09/2014)


The Herald (11 December 2012) Government bemoans high microfinance interest rate

The Microfinance Act Number 3 of 2013, (2013)

The Russian Microfinance Project (2000), Pricing for Microfinance, Document No. 55


Waterfield C., (2011), Is Transparency Enough? What is fair and Ethical in Pricing? Lancaster, USA, MFtransparency


Woller G. M. (2002), The promise and peril of microfinance commercialization, Small Enterprise Development 13, pp. 12-21


ZMWF, (2013), Options to Restrict Interest Rate that MFIs funded by ZMWF Currently Charge