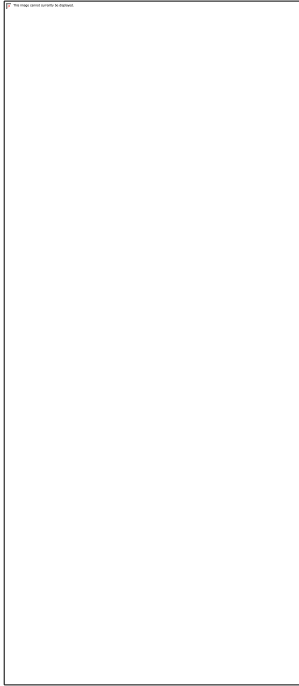


BINDURA UNIVERSITY OF SCIENCE EDUCATION

FACULTY OF COMMERCE

BACHELOR OF COMMERCE HONOR'S DEGREE IN BANKING AND FINANCE



**AN ASSESSMENT OF THE IMPACT OF COVID-19 ON THE PERFORMANCE OF
FINANCIAL INSTITUTIONS IN ZIMBABWE: A CASE STUDY OF MONEYMART
FINANCE (2019-2021).**

SUBMITTED BY:

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**A DISSERTATION SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENT
OF THE BACHELOR OF COMMERCE (HONOR'S) DEGREE IN BANKING AND
FINANCE OF BINDURA UNIVERSITY OF SCIENCE AND EDUCATION.**

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SUPERVISOR'S SIGNATURE

CHAPTER ONE

CHAPTER TWO

CHAPTER THREE

CHAPTER FOUR

CHAPTER FIVE

DATE

DECLARATION FORM

I, **Sauramba Munashe Precious.**, declare that this research study has not been submitted for any degree and that acknowledgements have been made to the contribution of others where appropriate.

.....

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...../...../.....

Date

DEDICATION

This dissertation is dedicated to my family and friends. Thank you for your unwavering support throughout the entire course of my studies.

ACKNOWLEDGEMENTS

My profound gratitude goes to my supervisor Dr A. Maune for his overwhelming support and guidance throughout this research, his effort is greatly appreciated. My sincerest gratitude also goes to all my lecturers who imparted me with knowledge throughout the degree programme.

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ABSTRACT

This study looked at the impact of Covid-19 on the performance of Financial Institutions in Zimbabwe (2019 to 2021). The study is guided by the research objectives which were to ascertain the impact of Covid-19 has on the performance of Financial Institutions, to examine the challenges associated with COVID-19 to Financial Institutions and to establish effective mitigatory strategies employed by Micro Finance Institutions during the Covid-19 crises. A mixed method approach was used henceforth questionnaires and semi structured interviews were used to collect data from 26 respondents who were part of the MoneyMart finance team (both managerial and non-managerial) and some few clients of the institution. Results deriving from the research were that Covid-19 has a negative effect on the performance of financial institutions in Zimbabwe. Since the inception of the concept of micro-finance in Zimbabwe, Micro-finance Institutions (MFIs) have operated under the stringiest of circumstances owing to economic instability. Most of the MFIs have found it difficult to survive and the state in which most of the MFIs are financially seem to hinder the continued existence and progress of the sector in servicing the economy as would be ideal. The study recommended that Financial Institutions (microfinance institutions) should transform their business models by embracing digital financial services platforms which are associated with cost reduction and effectiveness in assistance conveyance and high efficiency.

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Acronyms

ADF	Augmented Dickey Fuller test
ATM	Automated Teller Machines
GDP	Gross Domestic Product
LDC	Least Developed Countries
MIC	Medium Income Countries
MFI	Microfinance Institutions
NIM	Net Interest Margin
NPL	Non Performing Loans
NP	Net Profit
PAR	Portfolio At Risk
RBZ	Reserve Bank of Zimbabwe
ROA	Return On Assets
ROE	Return On Equity
SADC	Southern African Development Community
S.M.E	Small and Medium Enterprises
ZAMFI	Zimbabwe Association Microfinance Institutions

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CHAPTER ONE

INTRODUCTION

1.0 Introduction

This study is a rapid assessment exploring the effects of Covid-19 on the performance of financial institutions in Zimbabwe. In this chapter, the researcher seeks to give an overview of the study by highlighting the background of the study and its setting. The Zimbabwean financial services sector comprising banks, microfinance institutions, insurers and mobile money service providers was among the most. The scope of this research study will cover the background, intensity and after-effects of the global pandemic on financial institutions in Zimbabwe as well as proffering solutions to mitigate present and future casualties. With the pandemic still far over and apparent possibility of future pandemics, the aim of this research paper is to unearth the factors that made financial services sector vulnerable to the debilitating effects of the corona virus and suggest corrective and preventative measure for use by surviving institutions and new ones. This study is premised on the assumptions that pandemics such as Covid-19 are natural, unpredictable and unpreventable. It therefore, follows that financial services companies should be well equipped with the correct information on how to circumvent similar circumstances.

1.1 Background of the study

The time of January to March 2020 is when most SADC nations were starting to execute lockdown rules in a bid to check the spread of Covid-19 pandemic. In Zimbabwe, the public authority established a lockdown period which started on 30 March 2020 and was commanded to run at first for a time of three weeks, however was then stretched out by two additional weeks. It ought to be noticed that preceding the occurrence of the Covid-19 the microfinance area was at that point catching under the heaviness of macroeconomic difficulties connected with lacking subsidizing, excessive inflation, money unpredictability, cash deficiencies and high functional expenses. The impacts then of Covid-19 and its related adverse consequences on execution of the area.

MFIs use commercial financing including loans, bonds from financial markets, and bank obligations to supplement their daily operations. Due to high interest rates and other constraints, these financial services are frequently expensive (Mwakabumbe, 2013). As a result, MFIs must use more dependable sources to fund their projects. Traditional sources of

money in Zimbabwe have been reduced since the country adopted a multi-currency economy on February 13, 2009. The microfinance sector has been operating in a tight liquidity environment, which has resulted in restricted funding, limited credit generation, and high loan rates. A number of microfinance institutions are still attempting to create financial capacity in order to underwrite serious activity. The organic growth of microfinance institutions is hampered by low capitalization. The provision of financial services to low-income individuals and micro, small, and medium-sized businesses has been impeded by liquidity limitations and limited availability of wholesale funds in the economy. Coronavirus illness (COVID-19) has continuing to spread across the globe following the initial outbreaks in China at the end of 2019. This virus has struck every continent. The COVID-19 epidemic has evolved from a public health catastrophe to an economic and labor market shock, affecting both supply and demand (consumption and investment). However, complete or partial lockdowns and (Craven et al, 2020) movement limitations, as well as the enforcement of fundamental hygiene standards like hand sanitizing and social distancing, have been the most popular reaction strategies. These relief efforts have resulted in economic challenges, putting Microfinance institutions at risk (Zenker & Kock, 2020).

According to (OECD, 2020), SARS-Co V-2 (the virus that causes COVID-19) is the latest member of the coronavirus family affecting humans. After the first infections in China at the end of 2019, the coronavirus disease (COVID-19) has continued to spread across the world. No continent has been able to escape this virus. The pandemic, has transformed from being a health emergency into an economic and labour market shock, affecting not only supply (production and distribution of goods and services), but also demand (consumption and investment). The most common response measures however, have been the implementation of complete or partial lockdowns and movement restrictions, and the enforcement of basic hygiene practices such as hand sanitizing and social distancing (Craven et al, 2020). These alleviatory measures have subsequently spilled over to economic hardships and have had a direct negative impact on SMEs, (Zenker & Kock, 2020). This now had an negative effect on Microfinance Institutions as they lost some of their clients (including SMEs as they are part of their client base) and they were no longer operational due to the pandemic.

Customers of MFIs had a harder time repaying their loans due to their financial stress. Other studies back up the impact of the crisis on customers' ability to repay loans: a survey by Golubski et al (2020) of 1,500 microfinance providers serving 130 million clients across 11

Asian countries found that 90% of households and microenterprises had requested a grace period or loan repayment extension from their MFIs.

The lockdown rules set colossal severe standards which yield an extreme blow on assortments and distributions of credit by Micro-Finance Institutions prompting loss of income and benefit. These are a portion of the top issues of concern referred to that adversely affected Micro-Finance Institutions during the lockdown time frame: Client debilitation; powerlessness to dispense credits; income limitations; loss of income because of decreased loaning; non-reimbursement of advances; absence of actual admittance to office because of denial request and rules; outreach challenges particularly rustic regions; diminished interest for advances; delayed lockdown on casual area and markets; loss of clients and markets, and high working expenses because of new necessities connected with security and strength of labourers’.

With almost every financial institution in Zimbabwe either down-sizing branch network, retrenching employees or even closing shop, the need to investigate the causes, the gravity of the problem and after-effects cannot be over-emphasized.

The study is premised on the observation that some Zimbabwe’s most prominent banks, Standard Chartered bank, Stanbic, ZB Bank, National Merchant Bank (NMB) and Commercial Bank of Zimbabwe (CBZ) as well as building societies CABS and National Building Society (NBS) closed multiple branches and retrenched many workers. It was further observed that several microfinances institutions (MFIs) such as Thrive Microfinance, Lion Microfinance Bank, among others closed shop while others such as MoneyMart Finance, Microhub, Untu and Red Sphere survived extermination by a whisker. The demise and near death of the aforementioned institutions was first triggered by the inflationary environment created by Zimbabwe’s de-dollarization and the shutting down of informal sector, a market niche for almost all of them.

Microfinance institutions play a critical role in economic growth due to its focus on low income earners in the society and poverty eradication objective (Mwakabumbe, 2013). It basically entails financial institutions as they are labelled as risky borrowers hence attracting huge interests for amounts borrowed (Abdusalam, 2014). Microfinance institutions are primarily funded through equity, loans and credit lines. Since the adoption of the multi-currency system in Zimbabwe (February 2009), these traditional sources have been limited.

International Monetary Fund, (2020) alluded that MFI operations were also impacted by the crisis, largely due to logistical restrictions, rising bad debt, and changes in demand for credit.

Lockdowns and social distancing restrictions created logistical hurdles and made it more difficult for MFIs to reach their customers. In Zimbabwe, most MFIs were not classified as essential businesses and not allowed to continue operating during lockdowns, and those allowed to carry on business operations, restrictions still remained problematic: for example, curfews were enforced, and public transport was restricted which prevented employees from coming to work. This was especially the case for institutions that relied exclusively on face-to-face interactions with their clients. In addition, the financial difficulties of their customers put significant pressure on MFIs.

The study, therefore seeks to identify areas and outline specific casualties of the Covid-19 pandemic and suggest mitigation measures for use in the short to long term for the better financial services sector.

1.2 Research Problem

The pandemic has given governments around the globe the challenge of directing essential goods, such as food and medical equipment, where they are most needed to address the immediate health crisis. In addition to addressing the health crisis, they have scrambled to alleviate the impact of Covid-19 on Financial Institutions, introducing policies to help them cope with short-term financial risks and long term-business implications. Covid-19 has adversely affected the financial services sector in Zimbabwe, causing loss of revenue resulting in some of them down-sizing, retrenching and even closing shop. While no one can predict when the pandemic will wind up, as microfinance institutions play a critical role in economic growth due to its focus on low income earners in the society and poverty eradication objective (Mwakabumbe, 2013). It basically entails availing funds to the low income earners in the society who face various challenges in the normal financial institutions as they are labelled as risky borrowers hence attracting huge interests for amounts borrowed (Abdusalam, 2014). This study therefore, seeks to assess the impact of covid-19 on the performance of financial institutions in Zimbabwe.

1.3 Aim of the Study

The aim of the study is to examine the impact of Covid-19 on the performance of Financial Institutions (MFIs) and assessing the financial stability of Microfinance Institutions in the face of the continuing negative effects of Covid-19 pandemic. With the view of coming up with solutions to the problems that the pandemic has post on these Financial Institutions.

1.4 Research Objectives

- To ascertain the impact of Covid-19 has on the performance of Financial Institutions.
- To examine the challenges associated with COVID-19 to Financial Institutions.
- To establish effective mitigatory strategies employed by Micro Finance Institutions during the Covid-19 crises.

1.5 Research Questions

- What impact does Covid-19 have on the performance of Financial Institutions?
- What are the challenges associated with Covid-19 to Financial Institutions in Zimbabwe?
- What are the mitigatory strategies employed by Micro Finance Institutions during the Covid-19 crises?

1.6 Research Hypothesis

H₀: There is no significant link between COVID-19 and Financial institutions (Microfinance Institutions) performance.

H₁: There is a relationship between COVID-19 and Financial Institutions (Microfinance Institutions) performance.

1.7 Significance of the Study

This study will help by raising awareness on how various stakeholders such as policy makers in government, investors, academic institutions and scholars among others can make informed decision when the need raises.

1.7.1 Academic expertise

Future researchers will be motivated by the findings to learn more about what is still unknown about the impacts of covid-19 on microfinance institution performance. To help researchers gain a better knowledge of the subject. The researcher will continue to be equipped with a variety of research skills that will aid them in their academic and professional pursuits. As a result, through the study, the researcher can publish research journals, articles, e-books, and conference papers. The study focuses on the impact of covid-19 on the performance of financial institutions (MFIs) in Zimbabwe. This will help the researcher to expand her knowledge base. The research will help with problem-solving thus the benefit accrues to the researcher.

1.7.2 To the Investors

This research will give investors better in-depth knowledge and helps them understand the market condition. The study will also provide investors with possible information that will assist them before making any investment, investors will understand how the market is behaving and what could possibly happen. The research will provide an endless possibility of gaining knowledge that could give one investor an edge over the other, it will also reduce the risk of suffering a loss and increases your chances of success. This will make investors feel more confident in their investments. The study will provide a broader understanding of your investments and about the product that investors are investing in, it gives a clearer picture of what might happen. This clarity will enable investors in making more decisions, in a much better and effective way.

1.7.3 To Government Policy makers

The study is useful to the Government and policy makers (Ministry of Health and Ministry of Finance and economic development) and other stakeholders within the formal and informal sector as well as the society as a whole in comprehending the effectiveness of covid-19 measures to performance of microfinance institutions. Therefore, formulate and implement the policies which can save the economy from global pandemic effects to the economy of Zimbabwe.

1.7.4 To Bindura University of Science Education

The study can help Bindura University of science Education to function as a source for articles written with relevance to the impact of covid-19 on the performance of financial institutions (MFIs) in Zimbabwe. The University will also yield from the research by innovative added researchers. The study will help also future academics by providing these academics with education and serves as the basis for future research into various variables. And these articles may serve as well as a limelight for the legislators and other interested stakeholders. Prospect investigators will be driven again to explore further what can remain unknown in terms of the understanding of the study's findings in relations to the impact of Covid-19 on the performance of financial institutions.

1.8 Assumptions of the Study

This study has the following assumptions:

- Data collected by the researcher provides all necessary information required to carry out the research.
- The Microfinance(s) selected represented the microfinance industry.
- The respondents were aware of the subject of COVID-19 measures and their effectiveness.
- Interviewers were prepared to give their insight and experience, also respondents replied to all questions drafted on the questionnaire and returned them.
- The literature review provides a comprehensive perception into the study.

1.9 Scope of the Study

The research focused on MFIs registered by the RBZ in terms of the Microfinance Act (Chapter 24:29) in Zimbabwe. It did not include other microfinance service providers such as banks, nongovernmental organisations, unregistered microfinance institution, savings and credit unions, contract farming firms and other non-banking financial institutions. It should be noted that the sector is still be devilled with challenges that include some of the registered MFIs operating informally and not maintaining books of records (Reserve Bank, 2013). The data which was used on population, unemployment, inflation, foreign direct investment was gathered from World Bank and The Global Economy. Time period covered was from 2019 to 2022.

1.10 Delimitation

- Due to a limitation of resources in terms of time as the study was done during the Covid-19 period travelling was prohibited for some time because of the virus and some of the branches were not open for business. The researcher centered her study on understanding the effects of Covid-19 to MoneyMart Finances branches that have been in existence for five years or more. The study specifically focuses on the three objectives which are to ascertain the impact of Covid-19 has on the performance of Financial Institutions, to establish the economic effects of Covid-19 on Micro-Finance Institutions in Zimbabwe and to establish effective mitigatory strategies employed by Micro Finance Institutions during the Covid-19 crises.

1.11 Limitations

A number of limitations should be considered when interpreting the results of this research's findings. The following limitations were encountered during the course of the research:

- a) Confidential and private information withheld, however, reliance is place on available information supplied by respondents. To overcome these limitations, the researcher explained to respondents that their responses will not be shared with anyone.
- b) Resource shortages: The researcher encountered problems in securing resources such as textbooks due to inadequately resourced libraries in the country. However, to counter this limitation, the research study made use of paid internet cafes in town to source for relevant literature for the study.

1.12 Definitions of Terms

Micro-Finance: Thorsten Beck, 2015 defines micro-finance as attempts to provide financial services to households and micro-enterprises that are excluded from traditional commercial banking services. Typically, these are low-income, self-employed or informally employed individuals, with no formalized ownership titles on their assets and with limited formal identification papers. It is important to distinguish between the concept of microfinance and the providers of microfinance services, which comprise an array of different institutions, ranging 19 from commercial banks trying to reach out to the low-end of the market with specialized programs and commercial micro lenders.

COVID-19: A pneumonia differentiated from other coronavirus-caused infections, such as Extreme Acute Respiratory Syndrome (SARS) and Middle East Respiratory Syndrome (MERS), is a new airborne illness. The virus spreads easily, and at an exponential pace, outbreaks will develop. COVID-19-associated morbidity is also extremely high, (Zenker & Kock, 2020).

Financial performance: Financial performance is the company's financial condition over a certain period that includes the collection and use of funds measured by several indicators of capital adequacy ratio, liquidity, leverage, solvency, and profitability. Financial performance is the company's ability to manage and control its resources (Berger and Patti, 2016). Financial performance refers to how effectively a firm utilizes limited resources to produce resources which yield maximum revenues.

Small and Medium Enterprise (SME): An SME is defined as a registered business employing less than seventy-five (75) employees for the manufacturing sector and employing fifty (50) or fewer employees in all other sectors (Kushner, 2010).

The above mentioned definitions will be adopted in relation to this study on the impact of Covid-19 on the performance of Financial Institutions (MFIs) in Zimbabwe.

1.13 Chapter Summary

This chapter introduced the topic under study that impact of Covid-19 on the performance of Financial Institutions (MFIs) in Zimbabwe, the problem statement which is the problem that gave rise to the current research , purpose of the study that is the intent of the current study, the research questions that the current study will seek to answer, significance of the study, that is of importance the study will be to a selected group of stakeholders including the researcher and the Zimbabwean microfinance sector as a whole, assumptions from which the study will be drawn, delimitations and limitations of the study which includes what confines the current study in particular the time frame and other restrictions and lastly definition of important terms which the researcher found to be of significance in understanding the impact of COVID-19 on financial performance of MFIs, the selected definitions include that of financial performance, and COVID-19 among other terms that will be used within this research. The next chapter focuses on the review of related literature to the subject matter, in this chapter the researcher seeks to outline the theoretical framework, empirical framework and also try to bring out other related studies that are of significance to the current study

CHAPTER 2

LITERATURE REVIEW

2.0 Introduction

This chapter examines the impact of Covid-19 on the performance of Financial Institutions (MFIs) in Zimbabwe. Having reviewed the research problem, purpose of the study and objectives of the study on the previous chapter, this chapter proceeds to discuss the literature review. The objective of the literature review is to underwrite to an enhanced understanding of the nature and significance of the highlighted problem. Using theoretical insights, concepts and empirical evidence as well as studies in different religions the researcher will be able to identify gaps.

2.1 An Overview: Microfinance Institutions

Microcredit firms are another name for such. Their supply of financial services to the poor is based on the notion that the most disadvantaged state remedies will remain indefinitely to solve social ills including poverty, unemployment, and declining living standards (Chmelikova and Redlichova, 2020). Unemployed or low-income persons or S.M.E's who do not have access to financial services can use microfinance institutions to obtain banking services. They have arisen to alleviate poverty, according to Sun et al., 2020.

2.2 Theoretical Literature

Theoretical literature is reviewed so as to have an overview of what theory says in relation to performance of financial institutions (MFIs) in Zimbabwe. This section explains various theories that can be used to measure the performance of financial institutions (MFIs)

2.2.1 Intuitionists Approach Theory

The financial viability of microfinance institutions is the main emphasis of intuitionists. MFIs should be able to cover all of their costs with self-generated money and make a profit without relying on external financing, according to the institutions. A sustainable MFI is what they call it.

Financial deepening is the primary goal of microfinance institutions, according to the intuitionists. Creating sustainable financial intermediation for the poor is referred to as financial deepening at this point. The intuitionists look at MFIs' long-term viability through the lens of

the institution. Their view is that an MFI's institutional sustainability will be achieved once it is financially self-sufficient. That is, they must be able to operate independently of government support. The emphasis here is on an MFI's ability to pay its operating and financing costs with program revenue in order to remain sustainable. The variables of financial performance and financial sustainability are addressed in this theory.

Financial sustainability, as defined by financial self-sufficiency (profitability), should be given increased attention by all MFIs, according to intuitionists (Adusei, 2021). Their reasoning is based on the reality that donor dependence is not always guaranteed, and that unless an MFI can support itself financially, it would be unable to serve customers in the long run. In contrast to fostering financial sustainability, there is a risk that a focus on financial self-sufficiency will drive an MFI to abandon its donor funding goal. Mission drift is the term used to describe this type of behaviour.

2.2.2 The Resilience Theory

When it comes to organizational resilience, the term refers to our ability to manage crises while still reaching our goals when a risk or change occurs (Kraus et al, 2020). Natural catastrophes, economic or market disruptions, and even pandemic threats are among the risks and crisis events highlighted by the World Economic Forum (Ritter & Pedersen, 2020). In this case, firms will benefit much by understanding and putting in place solid plans. They will be able to handle any unfavourable event that arises. The ability to bounce back from traumatic experiences, cope with adversity, and successfully manage challenges in order to reach positive outcomes is defined as resilience (Barasa et al, 2018). The ability of microfinance organizations to bounce back from adversity and deal with the challenges provided by Covid-19 is defined by the study's author. In recent years, the sanitation issue and subsequent shutdown have highlighted the importance of company resilience. Because the current crisis could inflict long-term harm and financial losses, the business community and all businesses have taken a more proactive stance. Previous academics have utilized the resilience theory to demonstrate a variety of factors that influence MFIs' revenue. For example, (Fatoki, 2018) investigated the relationship between resilience qualities and entrepreneur success. The researchers used a multi-dimensional technique to assess resilience. Factor study revealed three dimensions of resilience: resourcefulness, optimism, and hardiness. According to the research, the three components of resilience are predictors of company success. Resourcefulness is the most important factor in predicting an entrepreneur's success. (Hannifar et al., 2019) investigated the link between MFIs'

resilience and their ability to innovate. The findings suggest that concept management, strategic management, knowledge management, and resilience all have a favourable relationship with innovation. As a result, the theory was determined to be beneficial to the ongoing research.

2.2.3 Liquidity Risk Theory

Mirpourian et al. recommend that microfinance institutions identify and examine the strong connections between liquidity risk and other types of risk (2016). MFIs should define and identify the liquidity risk they face for all legal entities, branches, and subsidiaries in the jurisdictions where they operate, according to Hermes and Hudon (2019). MFIs should think about how funding and market liquidity risks combine (Jean & Svensson, 2012). A MFI's liquidity profile can be influenced by a variety of financial and operational risks, such as interest rate, credit, operational, legal, and reputational concerns.

MFIs that get liquidity from capital markets should be aware that these sources of liquidity can be more volatile than typical retail deposits. Investors in money market instruments, for example, may demand more risk compensation, need rollover at much shorter maturities, or refuse to extend funding altogether in times of stress. Liquidity risk is frequently caused by perceived or real flaws, failures, or issues with the management of other risk kinds. A microfinance institution should be aware of market-influencing measures as well as public perceptions of its accuracy, especially in wholesale marketplaces (Jia et al, 2016). The variable of liquidity is addressed in this theory as a component of an MFI's financial sustainability.

2.2.4 Dynamic Capabilities Theory

David Teece, Gary Pisano, and Amy Shuen defined the phrase in their 1997 research *Dynamic Capabilities and Strategic Management* as "the firm's ability to integrate, build, and reconfigure internal and external competences to address dynamically changing surroundings." Dynamic capabilities theory is concerned with the creation of methods for senior management of successful companies to adjust to dramatic discontinuous change while preserving basic capacity requirements in order to preserve competitive survival. Dynamic capabilities refer to a company's capacity to integrate, build, and reconfigure internal and external resources/competences to meet and shape rapidly changing business situations (Hamidi, 2018). In the post-COVID world, nimble and resilient new businesses will be able to capitalize on the global chaos caused by the epidemic by leveraging their entrepreneurial mindset (Vu, 2020). In a climate characterised by high volatility and unpredictability, the need of a firm's dynamic

capabilities (DC) to integrate resources in detecting new opportunities is heightened (Teece, 2018). Both the role of Dynamic Capabilities and the function of resilience, as well as the speed with which new enterprises are able to learn, are differentiators between small business and entrepreneur survival and failure, both affecting their long-term growth and survival (Vu, 2020).

Third, there is a body of knowledge on the function of knowledge creation and absorption capabilities in minimizing the detrimental consequences of disasters and crises. The antecedent organizational and strategic methods by which managers modify their resource base, acquire and lose resources, integrate and recombine them to develop new value-creating strategies are known as dynamic capabilities (DC). Dynamic capabilities demonstrate an organization's potential to achieve new and imaginative sorts of competitive advantage, given path dependencies and market placement. Many businesses around the world are discovering that dealing with uncertainty (i.e., climate change, COVID-19) is the new normal, emphasizing the importance of developing competitive advantage and improving dynamic capabilities, which are critical for small businesses and appear to be the only antidotes to uncertainty during the COVID-19 pandemic. In their study of how small businesses cope with environmental changes due to the COVID-19 pandemic, (Kapoor et al., 2021) investigated how small businesses cope with environmental changes due to the COVID-19 pandemic by pursuing business model transformation with changes in dynamic capabilities related to adaptation of digital technologies and digital skills. The DC theory could be useful in dealing with the volatility, velocity, and criticality of COVID-19 impacts.

2.3 Microfinance efficiency and financial sustainability

Gonzalez-Vega (1998) defined efficiency as the ability of an MFI to produce the highest expected outcome at a given level of output. In support of that view, Woller (2000) also defined efficiency as the best way small loans can be delivered to the poor. This is necessary because costs should be reduced at a given level of operations to increase income at the same level of income. According to Glautier and Underdown (2001), profit can be used to measure efficiency in most MFIs where the institutions operate under the conditions of perfect competition. Internal and external factors usually affect the expenditure and incomes of MFIs, and these in turn affect the profitability of the institutions. The internal factors include the loan amount, the number of staff, and volume of costs and revenue of the MFIs. Factors not controlled by the firm which have an overall impact on profitability of the firm are called external factors and they include interest rate caps by government and salary levels.

2.3.1 Determinants of MFI profitability

According to Elliot and Elliot (2008), profitability is the situation where the income generated exceeds the total costs of the operations. Profitability is usually increased by holding the incomes constant or reducing all the expenses of the operations. Therefore, the determinants of income are also the determinants of profitability (Collier, 2006) as discussed below.

i) Interest rates

The rate of interest charged by MFIs on the outstanding loans determines the profitability. According to Satta (2002), the interest rates are the major source of income for MFIs and they should be set at a level where institutions are able to cover costs. Revenues realized by MFIs solely depends on the amount of loans made and levels of interest rates charged. Therefore, the higher the interest rates charged, the higher the revenue of an MFI and this makes these institutions sustainable. According to Armendariz and Murdoch (2007), interest rates charged should be an incentive to motivate borrowers to be compliant and also to motivate borrowers to take more loans. It is necessary for MFIs to deliver services that are demand driven and conduct market research before pegging interest rates to increase the borrowers.

ii) Loan amounts

The loan amount is the loaned funds that remained unpaid at the end of a certain period on which the interest is charged. The size of the loan determines the number of clients who are given the loans and this determines the outreach of an MFI (Kimando, 2012). It is accepted that the smaller the loan size, the more clients that can be served by an MFI, and this increases the income of the MFI.

iii) Term to maturity

Term to maturity is the actual time remaining for a loan to fall due. Instruments with longer maturity are riskier than those with short maturity (Lensink, 2007). Schreiner (2001) pointed out that long loans show greater profitability but less outreach, because long maturity loans attract high interests as more risk is associated with longer maturity (Lensink, 2007).

iv) Initial loan size

The amount of loan size disbursed is a critical aspect used to measure depth of outreach of an MFI. The loan size affects both profitability and outreach because the size of the initial loan determines interest income derived from the loan. In addition, the size of the loan reduced costs of evaluation and administering the loan (Schreiner, 2001). Schreiner further explained that the smaller the amount of loans disbursed, the higher the outreach because the MFI is able to reach many poor borrowers.

v) Number of instalments

Schreiner (2001) argues that frequency of instalments by the borrower means there is a high probability of default as borrowers can easily fall into arrears. Also there many transaction costs and bank charges because of frequent processing of transactions, and this has a negative effect on the profitability. In addition, poorer borrowers usually have few loan instalments because they have small loans. Therefore, few instalments have the potential to increase the profitability of an MFI.

vi) Loan repayment rate

High interest rates and large amounts of loans do not guarantee interest income for MFIs if the loan repayments are low. There should be higher loan repayments for an MFI to earn more income. Schreiner (2000) pointed that the sustainability of MFI is mainly determined by the effectiveness of loan repayment rates and the profit derived from loaned amounts. Loan repayment rates are determined by nature of products and effectiveness of collection policy (Evers et al, 2000). Effective collection policy by an MFI always leads to higher repayment rates and can lead to profitability (Schreiner, 2000). The repayment rates can be affected by delinquency policy, efficiency of loan officers and investment policies of the microfinance institution (Armendáriz and Morduch, 2007).

vii) Microfinance expenses

Expenses incurred by the MFI in their operations are very critical in determining the financial profitability of an MFI. The expenses include operating expenses, administrative and financing expenses. The operating expenses are costs associated with daily operations of the business. These costs are a function of clients the MFI serves, loan officer compensation and the repayment frequencies (Shankar, 2007). According to Meyer (2001) transactions can emanate from delivery method of products, losses from bad debts, lending types and corrupt loan officers. The other category of expenses is administrative expenses and financing costs.

2.3.2 Asset and liability management measures

These measures indicate how well the institutions manage its liabilities and the assets to generate the necessary income to attain financial sustainability. The current assets of an MFI are the major part of working capital and these also constitute the higher proportion of total assets of the institutions. The liabilities of the MFIs include the trade creditors, short tenure credits plus additional creditors. The methods used towards measuring assets and obligations in MFIs are explained below:

i) Yield on gross loan portfolio

The capability of MFIs to use prompt resources to create essential revenues, according to CGAP (2003), is demonstrated by their yield on gross loan portfolio. Interest on loans, fees, penalties, and commissions all contribute to the MFIs' cash flow. The yield on gross loan portfolio measures the difference between the actual cash collected from a loan portfolio and the average gross loan portfolio. The high ratio shows that the MFI is in a stronger position, indicating that it has efficiently employed its resources to create revenue.

ii) Current ratio

The ratio shows the value of currents available to meet the obligations of the firm commonly known as current liabilities (Brealey et al, 2006). This is also known as the liquidity ratio and it shows how effectively the MFI matches the assets and liabilities to be able to meet obligations when they fall due.

iii) Yield gap

The yield gap looks at what revenue has been received and what was expected to be received from the loans given. The small gap of almost 10 percent is the most appropriate for most MFIs (CGAP, 2003). The larger the gap means the MFI is not efficient in making collections and promoting the repayments.

2.3.3 Portfolio quality measures

Armendáriz and Morduch (2000) define portfolio quality as the ratio of portfolio at risk (PAR), write-off ratio, and risk coverage ratio. The metrics gaze at how the MFI creates and manages its loan portfolio, including reducing the negative consequences of adverse selection and following up on repayments to encourage high repayment rates.

i) Portfolio at risk

Fernando (2006), states that interest rates on loans provided by MFIs are their primary source of revenue. The loan portfolio is determined by the interest rate that will be obtained from loans. That is its significant since it implies that an MFI's main daily task is loan administration. The longer a loan is unpaid, the more likely it will be defaulted on (CGAP, 2003). The term "portfolio at risk" was used by Armendáriz and Morduch (2007) to describe a loan portfolio that has more principal in arrears than payments.

ii) Write-off ratio

It signifies the amounts of mortgages that have been removed from the balance of the loan portfolio because they appear as likely not to be paid (CGAP, 2003). After identifying these debts, the amounts are written off as unrecoverable debts. These written off loans are part of

operating expenses of MFI, hence they reduce their profitability. The higher the value of written off loans, the more inefficient the MFI is in collecting the bad debts.

iii) Risk coverage ratio

The ratio denotes the total reserved by the MFI to insure outstanding sums after a distinct period of interval has conceded. Loan-loss reserve is the term for the money set aside for this purpose (CGAP, 2003). The higher the coinage that should be set aside for this purpose, the longer the debts are unpaid.

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2.3.4 Productivity measures

These indicators demonstrate how well MFIs employ their staff and assets to improve loan repayments, increase revenue, and reduce overall microfinance spending (CGAP, 2003). These metrics are used to assess how effectively the MFI allocates its resources. The MFI's efficiency is measured using the productivity measures below:

i) Loan officer productivity

Loan officers are directly involved in MFI's income activities, according to CGAP (2003). Loan officers play a key role in most MFIs, as they are responsible for identifying clients, screening new clients, and following up on loan repayments. By dividing the number of active borrowers by the number of loan officers, the loan officer productivity can be computed. As a result, the more clients a loan officer serves, the more efficiently the MFI utilizes the loan officers.

ii) Personnel productivity

This is a number that determines how effective the MFI is in managing its clients and encouraging collection efforts in order to increase revenue (CGAP, 2003). The number of active borrowers is divided by the total number of MFI employees to arrive at this figure. The MFI is more efficient when the number of clients per employee is high.

iii) Average disbursed loan size

The most important product for MFIs is the loan product. The higher the number of loans disbursed, the greater the business of MFIs. According to (CGAP, 2003), the average loan size measures the average loan size given to clients. The size is computed by dividing the total value of loans given out in a period by the total number of loans given out at that period. The larger the size of the disbursed loan, the more efficient the MFI is in giving out its loans.

iv) Average outstanding loan size

The ratio shows how efficiently the MFI in collecting loan repayments and the amount which was disbursed should be less than what is outstanding (CGAP, 2003). The ratio is computed by dividing the total loan portfolio by the number of loans outstanding. The average outstanding should be significantly less and this shows that the MFI is outstanding.

v) Operating expenses ratio

The operating expenses ratio is the most commonly used ratio to measure the efficiency of MFIs. The ratio shows how the management of an MFI has been efficient in reducing expenses at a certain level. . The efficiency of the cost-cutting technique is demonstrated by a low expense ratio (CGAP, 2003). When an MFI operates at a cheap cost, it can boost its profits. All operating expenses are divided by the average gross portfolio to get the ratio. All administrative and personnel costs are factored into this percentage.

vi) Cost per borrower and cost per client ratios

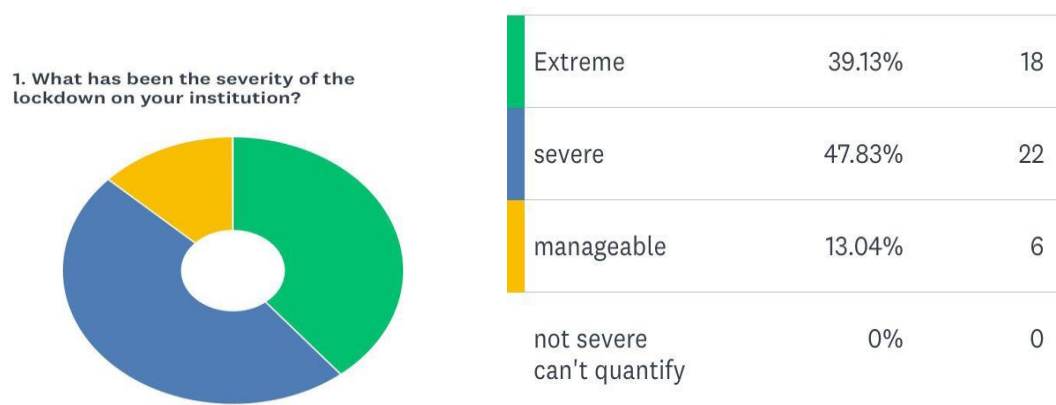
In terms of cost, the ratios represent the efficiency with which clients are served. This defines how much it costs to keep one client. The lower the cost, the more effective the MFI is at lowering the costs of keeping borrowers. When costs are reduced, the MFI can boost profitability, ensuring the MFI's long-term financial viability. This is computed by multiplying all operating costs by the average number of borrowers (CGAP, 2003).

2.4 Empirical Evidence

The Covid-19 pandemic, which became a global phenomenon, affected the performance of industry, resulted in job losses and closure of some micro and small businesses that are the main clients of microfinance institutions. The pandemic also retarded the progress that microfinance institutions had made in terms of access to financial services and women empowerment.

The number of microfinance institutions declined by 13.54% from 229 in December 2019 to 198 at the end of 2020, as some microfinance institutions closed due to viability challenges faced during the year (RBZ MICROFINANCE ANNUAL REPORT 2020). Zimbabwe Association Microfinance Institutions (ZAMFI) also conducted a mini survey from 30 March 2020 to 31 July 2020. According to the survey, 39.13 percent of respondents thought the lockdown time was extremely difficult for their business, while 47.83 percent said it was moderately difficult. This was the consensus of 86.96 percent of the people who took part in the survey. Given that most MFI operations are currently transitioning from high-touch low-tech to high-tech low-touch systems of operations, notably with regard to credit and accounting

transactions systems, these survey results were mainly predicted. Shown below is the severity of lockdown on MFI operations:



Sylwester Kozak, (2021) have researched on the impact of COVID-19 on bank equity and performance in Central Eastern South European Countries. Kozak states that the COVID-19 pandemic caused the worst crisis in the global economy since the 2007–2009 global financial crisis. It slowed down, and temporarily froze, the functioning of both the real and financial sectors, including banks. The estimates of the International Monetary Fund (IMF) analysts indicate that the pandemic reduced the value of global GDP in 2020 by 3.2%. GDP fell the most in advanced economies (AE)-by 4.6%, while in emerging market (EM) countries, it fell by 2.1%, including the Emerging and Developing Europe (EDE) countries by 2% as well. The larger losses were experienced by hospitality and tourism industry, retail, and commercial real estate market, as their worldwide sales in the second quarter of 2020 decreased by 80%, 60%, and 50% y/y, respectively. According to some central banks, these negative processes transferred to the financial sector, mainly to banks, and resulted in a significant tightening of the credit policy, as well as a deterioration in the creditworthiness of borrowers, mainly from the SME sector. On the customers' side, the uncertainty about the scale of the pandemic development contributed to a decline in demand for financing investment and current capital, as well as consumer goods and services.

Malik et al. (2020) used a rapid response phone survey of about 1,000 microenterprise owners, a survey of about 200 microfinance loan officers, and interviews with regulators and senior representatives of microfinance institutions to investigate the implications of Covid-19 for microfinance institutions in Pakistan. They discovered that, on average, sales and household income plummeted by 90% from week to week. As a result, 70% of existing microfinance borrowers said they couldn't repay their loans.

The COVID-19 shutdown in Zimbabwe will be challenging for the informal economy, according to (Chagonda, 2020), because most dealers are poor subsistence traders. The border closures are expected to disproportionately affect women and youth, who make up the majority of the population working in ICBT. Still on Zimbabwe, (Zamchiya et al., 2020) argue that national lockdown restrictions on the movement of goods, people, and services will have far-reaching consequences for the agricultural sector and food supply chains, potentially increasing the country's food crisis. (Stuart, 2020a) investigated how border closures will affect the vulnerability of host ICBT communities in the Mazabuka region of south-central Zambia, which also includes a portion of north-western Zimbabwe. These people are vulnerable, as they live on a meager income and rely on cross-border trading to survive. As a result, border closures and the resulting lack of market access constitute a serious threat to the survival of the human race (Stuart, 2020a).

2.4.1 The impact of Covid-19 has on the performance of Financial Institutions.

Demircuc-Kunt et al. (2021) investigate the influence of the COVID-19 epidemic on the microfinance sector's share price by looking at government and central bank regulation measures. The findings suggest that in nations with expansionary monetary policy, the banking industry's share price tends to rise due to liquidity support policies for banks and interest rate support policies for borrowers. The banking sector's share price, on the other hand, tends to fall in countries with cautious monetary policies.

From an economic perspective, SainzFernandez et al. (2015) researched microfinance crises and based their microfinance crises idea on Daniel Rozas's work, which suggested that MFIs with a portfolio at risk for more than thirty days (PAR 30) and a write-off ratio more than 20% were in crisis. Both internal and external factors increase the likelihood of a crisis, according to SainzFernandez et al. (2015). Internal factors such as organizational architecture, staffing structure, excess liquidity resulting in a high deposit–loan ratio, profitability, and the MFI's size, as well as external factors such as macroeconomic and institutional issues, all have a role in the likelihood of a crisis. The influence of the COVID-19 epidemic on the performance of firms around the world is examined by Hu and Zhang (2021). The findings of the investigation demonstrate that, on a global scale, company performance is declining as a result of the COVID-19 pandemic's detrimental effects. Companies are enhanced in countries with better universal health care systems.

The influence of the COVID-19 pandemic on microfinance profitability and risk is examined by Li et al. (2021). The findings demonstrate that when the COVID-19 epidemic has a significant impact on traditional credit activities, microfinances with a large percentage of revenue from credit activities will be significantly impacted. Microfinances with solid income diversification and significant service revenues, on the other hand, have improved profits by capitalizing on the COVID-19 pandemic's positive characteristics.

Boateng's study is one of the research that highlights the differences in the factors of bank profitability between countries (2018). Credit risk, net interest margin, capital sufficiency, and inflation were found to have a substantial impact on bank profitability as evaluated by ROA in both Ghana and India, according to the study. Liquidity risk and GDP growth, on the other hand, were found to have insignificant effects on bank profitability in both countries, whereas cost to income ratio and bank size were found to have insignificant effects on Indian bank profitability but were highly significant for Ghanaian bank profitability. Almaqtari et al. (2019) discovered that bank size, number of branches, assets management ratio, operational efficiency, and leverage ratio were key bank specific factors in explaining the profitability of Indian commercial banks as measured by ROA, while asset quality ratio, asset management ratio, bank size, and liquidity ratio were positively and significantly affected by ROE. Furthermore, gross domestic product, inflation rate, interest rate, financial crisis, and exchange rate all have a substantial impact on ROE, whereas demonization, interest rate, exchange rate, and inflation rate all have a big impact on ROA.

Furthermore, the factors that influence the profitability of microfinance appear to change over time within countries. Sufian and Habibullah (2009) and Rahman et al. (2015), for example, looked at the elements that affect microfinance profitability in Bangladesh as measured by ROA, ROE, and NIM, and found that loan intensity had a positive and significant impact. Non-interest income, credit risk, and cost were all found to have a significant impact on all three measures of profitability by Sufian and Habibullah (2009), while capital strength (both regulatory and equity capital), cost efficiency, and off-balance sheet activities were all found to have a significant impact on all three measures of profitability by Rahman et al. (2015). Sufian and Habibullah (2009) also discovered that the impact of size was not uniform across all employed measures of profitability, and that macroeconomic determinants had no significant impact on profitability, with the exception of inflation, which had a negative relationship with Bangladesh microfinance' profitability as measured by NIM. Other variables used in the study, such as non-interest income, credit risk, and GDP, were shown to have inconsistent effects on NIM, but size had a positive and substantial impact on ROA and

inflation had a negative and significant impact on ROA and ROE, according to Rahman et al. (2015).

Further Adelopo et al. (2018) analyzed the way of behaving of the determinants of microfinance productivity in the periods before, during and post the worldwide monetary emergency in the Economic Community of West African States. The investigation discovered that ROA previously, during, and after the monetary emergency was essentially impacted by cost administration, liquidity and size while the impact of explicit factors, for example, market power, credit chance and capital strength and macroeconomic factors, for example, GDP and expansion was delicate to the applied times of examination and productivity measure. The concentrate accordingly concluded that by and large the monetary crisis affected connections between a few microfinance-explicit determinants and profit.

In the 23 countries studied by Le and Ngo (2020), the number of automated teller machines (ATMs), point of sale (POS) terminals, and bank cards issued could improve profitability, whereas market power has a negative impact on microfinance profitability, which could indicate the beneficial effects of competition on profitability.

Even though the pandemic is expected to negatively affect microfinance systems in low-income countries, especially where banks remain the leading providers of financial services, the emerging body of literature on the effects of the COVID-19 pandemic on the microfinance sector is mostly applicable to advanced economies (Barua and Barua 2020). (Damak et al. 2020). Elnahass et al. (2021) and Barua and Barua (2001) are two of the few research accessible in the setting of emerging and developing countries, their studies looked at the influence of the continuing COVID-19 pandemic on global stability and concluded that the epidemic had a negative impact on both financial stability and performance. The findings were consistent across the global banking sector's diverse regions and countries, as well as at varied degrees of country income creation and bank characteristics. Furthermore, the study discovered that the pandemic had significant differences in its impact on conventional and Islamic banking systems, despite the fact that trend analyses based on financial stability over quarterly periods and bank average performance identified the bank stability signal for recovery in the second quarter of 2020.

In a study of the microfinance sector in Bangladesh, Barua and Barua (2020) looked at the effects of the COVID-19 pandemic on firm value, capital adequacy, and interest income under various NPL shock scenarios and found that the pandemic will likely negatively affect all capital adequacy ratios, interest income, and risk-weighted asset values at both sectoral and individual bank levels, though larger banks will be hit harder. Furthermore, if NPL shocks are

more severe, the decrease in firm value, capital adequacy, and interest income will be disproportionately bigger. Even more concerning is the finding that in the event of a 10% NPL shock, all capital adequacy could fall below the minimum BASEL-III requirement, whereas a shock of 13% or more will likely cause banks' capital adequacy to fall to zero or negative at the sectoral level, prompting the authors to recommend immediate policy action to address the crisis in order to avoid a potentially large-scale and contagious crisis in Bangladesh.

As a result, given the scarcity of material in the context of developing nations, this paper adds to the existing literature by giving empirical information on the impact of the COVID-19 pandemic on the microfinance sector in Zimbabwe. The study looks into the impact of the COVID-19 epidemic on profitability while accounting for bank-specific characteristics like non-performing loans, liquidity, and market sensitivity, as well as macroeconomic determinants like real GDP, inflation, nominal exchange rate, and lending rate.

2.4.2 The challenges associated with COVID-19 to Financial Institutions.

MFIs are just as vulnerable as any other institution during the phases of a crisis, and they are much more exposed when the crisis lasts longer due to Covid-19. The interaction of stakeholders in MFIs becomes disorganized, and the organization's reputation suffers (Olsen, 2017; Schultz, Utz, & Göritz, 2011). Aside from the damage to institutions, a crisis halts the resources of the organization's dependents and destroys the life savings of investors (Boateng et al., 2016). Above all, a financial institution crisis tarnishes the whole financial services industry and discredits the institution's managers and regulators. Various authors portrayed the microfinance crisis from a variety of perspectives and experiences.

Internal and external factors are at play in the microfinance problem (Boateng et al., 2016; Breza & Kinnan, 2016). External crises, on the other hand, are caused by external factors such as poor macroeconomic conditions in a country. Repayment problems, delinquency and reputational crises, mission drift crises, profitability and sustainability difficulties were all part of the usual internal micro finance crisis in Pakistan (Mia et al., 2019). Prior to the 2008 financial crisis, Morocco's microfinance business had rapid growth, fierce competition, weak lending discipline, and poor governance and controls (International Finance Corporation, 2014).

The numerous financial services crises have comparable effects in terms of disruption, financial loss, and reputational harm. According to Valackien and Virbickait (2011), the two most common terms scholars identify with a financial institution's issue are insolvency and

bankruptcy. Unlike insolvency, which occurs when a company's obligations exceed half of its capital, bankruptcy is the final stage of a crisis and a legally advanced level that necessitates outside involvement (Valackiene & Virbickaite, 2011). As a result, in the microfinance setting, the concept of crisis will inevitably include some amount of insolvency and bankruptcy, in addition to all other events that endanger an organization's survival. Boateng et al. (2016) detailed the numerous efforts undertaken by various institutions contributing to the insolvency and bankruptcy crisis, and their description echoed Valackien and Virbickait's concept.

The COVID-19 contagion shows many African countries' fundamental flaws, such as their heavy reliance on commodity exports and the spillover impacts of conflicts. Oil-and resource-dependent countries account for 72 percent of GDP in LDCs and MICs, and 96 percent of GDP in conflict-affected countries. In 2020, a 3.4% immediate economic downturn is expected (AfDB, 2020). This is 7.3% lower than the growth anticipated before to the outbreak of the COVID-19 pandemic, which affected African countries differently. This is unsurprising given their disparities in beginning structural positions, macroeconomic fundamentals, and governmental responses to the crisis. Nigeria (-7.2%) and South Africa (-7.5%) account for more than half of Africa's economic downturn in 2020. (AfDB, 2020). More diversified economies, such as Egypt's (0.8%), Ghana's (1.2%), and Rwanda's (2.9%), are seeing less severe GDP declines, but are nevertheless anticipated to expand substantially less than pre-pandemic estimates (AfDB, 2020).

Growth rates are predicted to rebound to 2.4 percent in 2021, 1.7 percent lower than pre-pandemic projections. LDCs are expected to expand faster than MICs and conflict-affected countries in 2021 as well. Given the high internal and external uncertainty, the prospect for at least a partial V-shape economic recovery may be overly optimistic. Long-term and escalating coronavirus infection rates could hinder economic recovery by restricting human movement – and consequently economic activity.

The economic burden of COVID-19 related morbidity and mortality, government attempts to limit the spread of SARS-CoV-2 are having profound economic impacts, with the global economy projected to shrink by 8% (world bank, 2015). However, recent evidence indicates that low-income countries, with their limited health system capacities, are likely to suffer infection and mortality rates similar to or greater than those currently suffered by upper-income countries. While research on the health impacts of COVID-19 in low-income countries is rapidly emerging, there is limited evidence on the socioeconomic impacts of the pandemic. The

evidence that exists relies primarily on pre-COVID-19 macroeconomic data and simulation models to forecast potential future scenarios based on assumptions about the disease spread. An acute challenge emerging from the global pandemic is how individuals and communities are to strike the balance between the health benefits and the economic costs of managing the spread of the virus. Even in high-income countries, which tend to be data rich in terms of health and economic information, striking this balance frequently proves politically difficult. By contrast, low-income countries, which tend to be resource-constrained, are data poor in terms of reliable and timely information on the spread of SARS-CoV-2 and on the economic impacts of ant contagion policies. Our objective is to directly, at the household, individual, and child levels, the socioeconomic impacts of the pandemic and the policies implemented to slow the spread of the virus. Our hope is to learn from how individuals in these four countries cope with the socioeconomic effects of the virus. This can inform decisions by governments and international aid organizations regarding how best to mitigate the persisting effects of the COVID-19 pandemic.

African nations have significantly expanded public spending to fight off the results of their public strategy reactions to the COVID-19 pandemic, including lockdowns and boundary limitations. Expansionary financial approaches have made monetary shortfalls expand from 4.7 percent in 2019 to 9.0 percent in 2020. They are projected to lessen marginally to 7.9 percent in 2021 because of easing back financial movement and more noteworthy consumptions (AfDB, 2020). Expanded monetary spending during the COVID-19 pandemic might enlarge the generally high obligation levels of a few African economies and make sovereign obligation emergencies (Okonjo-Iweala, 2020). Pandemic impacts are projected to build the obligation to-GDP proportion by a normal 7.3 percent of GDP in 2020 - to 64.8 percent of GDP in 2021 (IMF, 2020a). Increasing yields of sovereign securities make it progressively troublesome, in the event that certainly feasible, for African nations to get to global supporting for expansionary monetary arrangements (AfDB, 2020, p. 18). Also, income activation is projected to fall on normal by 2.6 percent of GDP in 2020 contrasted with 2019 (IMF, 2020). Declining monetary equilibriums in African nations will restrict the financial possibility expected to help restore and modernize economies through green changes.

Income is an issue for all legislatures: Without it, states have restricted abilities to carry out approaches, give security and meet residents' essential requirements. Particularly during difficulties, trustful relations between the state and residents are critical for legitimizing income assortment (Box 3). The COVID-19 pandemic will make charge incomes fall emphatically before very long. The World Bank gauges that Sub-Saharan Africa (SSA) will see a 12 to 16

percent drop in state incomes, contingent upon the degree of the wellbeing emergency (World Bank, 2020e). The pandemic's drawn out impacts on the worldwide economy will likewise diminish charge incomes in the medium and long haul by restricting assessment bases. Income is dropping forcefully right at the time spending needs - projected at around USD 100 billion - are expanding. The monetary difficulties are colossal. During the new UN General Assembly, African pioneers begged global accomplices for monetary help, including expansion of the G20 obligation ban to "stay away from infection end times" (Cara, 2020).

2.4.3 To establish effective mitigatory strategies employed by Micro Finance Institutions during the Covid-19 crises.

Organizations and their stakeholders are affected differently by any type of crisis. Mitigation techniques will be devised by crisis leaders to lessen the likelihood of the event occurring, the magnitude of the effects, or both (Kirkos, 2015; Yang, Hsu, Sarker, & Lee, 2017). Given the fact that the crisis would have already happened, the focus of mitigation in this study will be on minimizing the magnitude of the crisis results. Leaders must recognize warning indicators and put in place preventive measures in situations where mitigation will prevent a catastrophe from arising. Furthermore, while a crisis as an event or process denotes unpredictability or unpreparedness, Aljuhmani and Emeagwali (2017) argued that only the best-prepared organizations have programs in place to mitigate the crisis's effects on stakeholders and can return the business to a previous or improved state.

Ponis and Ntalla (2016) proposed that crisis mitigation measures include innovation, multiple sources of a supplier, cooperation management, maintaining tight relationships with supply chain stakeholders, capacity flexibility, and proactive crisis management approaches. Furthermore, according to Pearson and Mitroff (1993), no matter how complex a crisis appears to be, the deliberate strategy of taking at least one significant action involving strategic, technical and structural, evaluation and diagnostic, communication psychological, and cultural actions will cushion the organization during a crisis. As a result, crisis mitigation cannot occur unless companies establish appropriate communication techniques and timing with and among stakeholders on a deliberate basis.

Operational efficiency of production units is defined by Berger and Mester (1997) as the link between revenue from outputs and the expenses of employing inputs, or the ability to turn inputs into the best outputs throughout the course of operation. Microfinance efficiency, according to Berger and Mester (1997), is defined as the biggest output revenues that may be

achieved through microfinance given the least value of inputs. When a microfinance institution achieves both allocative and technical efficiency, it is said to be cost-effective or to have achieved total economic efficiency (Banker et al., 1984).

Inside the extent of this review, microfinance' effectiveness is considered as whether the microfinance use inputs and augment possible result or whether the microfinance can limit the utilization of contributions to accomplish pre-decided yield targets. Microfinance accomplish functional effectiveness when they can produce the biggest result incomes by involving similar measure of contributions as different banks yet with the most minimal expenses (Hassan and Tufte, 2001; Coelli et al., 2005; Staub et al., 2010).

Present day strategies for estimating proficiency started with the investigations by Farrell (1957), which depend on the examinations by Debreu (1951) and Koopmans (1951), to give an essential meaning of the productivity of an organization or creation unit with numerous information sources and results. Monetary productivity is considered as the level of accomplishment that creation units or banks accomplish in dispensing contributions to advance results. Coelli et al. (2005) deterioration of functional effectiveness into various kinds of efficiencies, for example, specialized productivity, for example the capacity to limit the utilization of contributions to deliver a pre-decided yield, and allocative proficiency, for example concerned about choosing inputs (work, capital, innovation, and so on) that produce yields at the least expense. Consolidating specialized effectiveness and allocative proficiency will make in general monetary productivity or cost effectiveness.

With a constant returns to scale (CRS) model, Charnes et al. (1978) presented a parametric technique of DEA analysis. Banker et al. (1984) modified this into a variable returns to scale (VRS) model due to several restrictions. The foundation of DEA is operational efficiency measurement based on the production capability frontier of businesses, banks, or decision-making units (DMU).

The impact of crisis can be tended to from both preventive, proactive and responsive viewpoints (Gurtner, 2016; Lam and Su, 2015), contingent upon the period of the event (Gaudard and Romerio, 2015; Sztojanov and Stamatescu, 2015). Subsequently the emergency impact moderation technique can not be widespread. All the more likewise, given most emergencies have early signals that recommend expected risk, detecting and taking proactive course is considered the most vital move toward dodging or settling a crisis or limiting their effect (Aljuhmani and Emeagwali, 2017). Essentially, Mishra (2016) fought that emergency

correspondence ought to be seen as a proactive capability as opposed to a responsive one to help disaster supervisors to expect potential disasters, get ready to oversee and determine the crisis, go to healing lengths during, and plan key partners to construct the organization validity before the emergency happens. Hence, picking early admonition frameworks, proactive preparation, key-gauging, emergency mindfulness, situation investigation, and hazard examination would be more fitting.

However, while the institutions are in crisis, business continuity management, crisis communications, emergency management, and contingency planning would be better options. These management options become critical because their absence can be detrimental to the organization's sustainability. Furthermore, Šontait-Petkevienė (2015) proposed that organizations with a more favourable prior status will have a stronger post-crisis reputation than organizations with an unfavourable or neutral prior reputation. Oh, Chen, and Hung-Baesecke (2017) also considered five criteria that influenced how participants perceived post-crisis CSR, including impact, continuity, uniqueness, transparency, and controllability. The authors discovered that as long as the motives are obvious, stakeholders will accept both self-serving and altruistic motives. According to Kim and Choi (2016), consumers react more favorably when a company launches a CSR initiative that directly addresses the crisis issue or when there is sufficient evidence that the crisis was caused by an accident rather than a transgression.

While disaster pioneers draw in partners in emergency correspondence, inward activities should supplement messages. A crisis impact relief process should have a construction to forecast more uncontrolled circumstances aside the alternative (Hofmann, Betke, and Sackmann, 2015). The creators proposed a coordinated effort the executive's foundation that utilizations cycle formats that give the underlying exercises, control and information stream construction, and assets expected to begin moderating a collection of tragedy situations.

In crisis, directors have the obligation to pick the fitting system layout. Enhancing includes choosing and adding new cycle layouts, making new exercises, jobs, and teams depending on the situation to manage the ongoing requests in the crisis, and assigning liabilities to handle members and teams. Consequently, there should be clear methodology in dealing with moderation processes. Cooperation the executives includes catching joint effort processes, planning the exercises of the applications and human members, and additionally giving mindfulness by conveying joint effort related data to members. Drakaki and Tzionas (2017)

are likewise advocates of coordination and cooperation of all partners towards effective activity executions and positive variation after the emergency.

2.4 Research gap analysis

Several conclusions can be drawn from the literature herein. Several studies had been carried out by several various researchers to shed light on what affects financial performances of Microfinance Institutions. However, it was of concern that little has been done to ascertain the impact of Covid-19 on financial performance of Microfinance Institutions. It requires more empirical works which the study attempts to fill as this is still new to our country. This is because no study/research has been done in Zimbabwe pertaining the study topic. Many cases have been done in developed countries pertaining Covid-19 and their Microfinance institution set up is different from the one we have in developing countries.

2.5 Chapter Summary

Overall, COVID-19 impacts in most African countries are mainly through their linkages with the global economy, particularly microfinance sector. Thus, a drop in world demand and the resultant commodity price drops, affected production and export performance of African countries more than did their own COVID-19 control measures. Assessing the functional productivity of microfinance previously and during the COVID-19 pandemic assists microfinance and controllers with concocting answers for further develop execution of microfinances with regards to the drawn out COVID-19 pandemic in Zimbabwe.

The contribution of this research to the relevant literature lies, first of all, in focusing on the impact of Covid-19 to MoneyMart Finance using various measures. The underlying objective of the present study is to explore the impact of Covid-19 to microfinance and find the solutions to impact of this pandemic.

CHAPTER 3

RESEARCH METHODOLOGY

3.0 Introduction

This section will give a clear and detailed description on how the research will be carried out. According to (Saunders et al., 2011) methodology is usually a guideline system for solving a problem with specific components such as phases, tasks, methods and tools. The research methodology shall cover the research design, research instruments, reliability and validity issues, targeted population, ethical considerations, sample and sampling procedures, data collection procedure and data analysis and presentation.

3.1 Research Philosophy

The method knowledge created based on one's perspective and beliefs is known as research philosophy (Saunders et al 2009). The research will be carried out utilizing a pragmatic research philosophy that combines qualitative and quantitative methodologies. This is because the study's goal is to look into the influence of Covid-19 on the performance of financial institutions (MFIs) and to analyse the financial stability of MFIs in the face of the pandemic's ongoing negative consequences.

Mixed methods research, according to Creswell (2007), helps to answer research questions that cannot be answered using only quantitative or qualitative approaches and provides a better set of instruments to achieve the study's goals and objectives.

3.2 Research Approach

Robinson (2014) defined three types of research methods: quantitative, qualitative, and mixed. This project will employ a quantitative research approach to find solutions to the challenges that the epidemic has caused on these financial institutions.

3.3 Research Strategies

A case study of a microfinance institution (MoneyMart Finance) will be used in this study. According to Saunders et al. (2009), a research strategy is the way that a researcher uses to answer a research topic by presenting arguments on the question using methodologies that are suitable to a deductive or inductive approach. Case study research allows for a thorough and multifaceted examination of the problem. Quantitative, qualitative, or a combination of both types of data can be used.

In this case study, information is gathered from a variety of sources and through the application of several methods, including interviews, document analysis, observations, and surveys. The researcher will make use of questionnaires and interviews to obtain the information in line with the study.

3.4 Research Design

The term "research design" refers to a method for collecting data in order to provide useful data for decision-making. Explanatory research, according to Saunders et al. (2009), aims to establish a relationship between variables, that is, to determine how one variable influences another, as well as to provide an explanation for the causes and/or consequences of one or more variables.

The purpose of this study, which is both explanatory and cross-sectional, is to determine the impact of Covid-19 on financial institution performance (Microfinance Institutions: MoneyMart Finance). To obtain data, the researcher will use the explanatory research design as it will bring the relationship between the variables (COVID-19 and financial performance) and the researcher will also employ a structured questionnaire.

3.5 Target Population and Sampling

The study's target audience will include some staff members and customers of the MoneyMart Finance. According to Gall (2009), a population is a huge group about which one wants to learn more. A population is a collection of items (people and objects) that have some common traits as will be indicated by the researcher's sampling criteria. The target demographic is the group of people for whom information is sought. The firm has over branches in Zimbabwe and the population consists of managerial and non-managerial personnel. Out of the many branches only the Head-office (which is located in Eastlea, Harare), Mbare and Bindura branches will be the targeted population to provide information pertaining the challenges faced in line with the study.

3.5.1 Sample Frame

A sample frame is a rundown of the real cases from which the sample will be drawn. The sampling frame will be an illustrative of the population (Taherdoost 2016). The study is centred on a sample frame of fifty-four participants in conducting the research. The sample frame consisted of the managerial and non-managerial employees at MoneyMart Finance.

Table 3.5.1.1 Sample Size

Class	Total population	Target sample
Managerial	11	7
Non-managerial	18	9
Clients	25	10
Total	54	26

Due to Covid-19 limits, only a few members of the Head Office, Mbare and Bindura branches, and a few of the organization's clients will participate in this exercise. According to Devaurs (2002), a sample size of 50% of the entire population is sufficient for drawing definite conclusions, which is why the study sample will be chosen. Also due to the respondents' busy schedules, convenience sampling with strict Covid-19 constraints will be employed to pick the respondents. Sample size refers to the number of persons who will be involved in a study (Toherdoost 2017). The sample size will be 26 respondents, with 7 managerial employees to respond to semi-structured interviews, 9 lower level employees to respond to semi-structured questionnaires in various branches, and 10 customers to respond to semi-structured questionnaires who were most affected by the lockdown restrictions/pandemic. According to Devaurs (2002), a sample size that is 50% of the total population that is quite adequate to produce concrete conclusions, thus the basis of the chosen study sample. Due to the tight schedules of the respondents, convenience sampling will be used to select the respondents.

3.6 Research Instrument

Research instruments, according to Mugenda & Mugenda (2003), are tools used to collect data in order to answer research questions. In order to get the necessary information, the researcher will use questionnaires and interviews. Primary data collection methods will be used as the researcher want first-hand information from the participant who will be chosen for this research

3.6.1 Primary Data

Primary data is information gathered for research from a specific location where events occurred. According to McGivern (2009), primary data does not exist before data gathering. To collect primary data, questionnaires and personal interviews will be used. Primary data, according to Saunders (2009), can be described as guided explanations or descriptions of

events. Primary data is information obtained directly from respondents via questionnaires and personal interviews.

3.6.1.1 Questionnaires

According to Mugenda & Mugenda (2003), a questionnaire is a set of questions given to a respondent to answer in writing and return to the researcher. The questionnaire will be used by the researcher to collect primary data from the respondents. Questionnaires will be created in order to collect survey data that will help researchers better understand the influence of Covid-19 on microfinance institution performance. Many of the questions will be closed-ended, while some will be open-ended to allow responders to express their opinions.

The researcher adopted the use of questionnaire because it allows collection of data from a large sample and is less time consuming. Questionnaires are used often in qualitative research. This was supported by Haralambos and Holborn (2010:707) when they said “questionnaire collects qualitative data which is richer, more vital and having great depth and is more likely to present a true picture of life of peoples experiences, attitudes and beliefs”.

Questionnaires will be chosen because: they will save time and it will be an inexpensive way of surveying a large cross-section of people; it will also allow the researcher to guide participants along lines of thought with the regard to the investigation.

3.6.1.2 Interviews

An interview, according to Creswell (2007), is a direct means of gathering information in a face-to-face context. This instrument will be used to supplement the questionnaire method by the researcher. The interview will be set up in such a way that respondents will feel free to express their thoughts on the subject being investigated. In addition, the interview will be semi-structured, allowing for some questions and topic selection.

Interviews are similar to questionnaire, more information will be gathered from different personnel as it is a conversational face to face way of collecting data and it allows use of open-ended questions.

The research will be choosing interviews because: they are quick thereby reducing the time constraint as all questions will be answered; they will have better response rate and they will clarify questions; it will allow the research to use non-verbal communication as the research will be able to read facial gestures of respondents on sensitive topics.

3.7 Pilot Study

A pilot survey will be conducted in which questionnaires will be distributed to various individuals in mandate to alter questions and eliminate any potential problems. Prior to consulting and asking advice from the supervisor, data collection tools will be used and will pre-test the instruments to ensure reliability and validity.

3.8 Reliability and validity/Trustworthiness

The capacity to deliver on a promise consistently and precisely is referred to as reliability (Beri, 2000). This author claims that reliability can be verified by asking three questions: will the measures produce the same results on subsequent occasions? Will other people come to similar conclusions? Is the process of deducing meaning from raw data transparent? Validity, according to Lee (2014), is the process of determining whether estimation procedures are accurate and whether they are truly estimating what they intend to quantify. It provides assurance that the data acquired from the targeted population is accurate. According to Saunders (2009), the consistency of the findings in which the results will be collected and analysed is the dependability of the research instruments. To ensure reliability and validity, the researcher will employ interviews and questionnaires as research instruments in this study.

3.9 Data Analysis

The data analysis method used in this research was quantitative analysis. Survey data collected through the questionnaires were rearranged, edited and coded to ensure quality and completeness. Secondary data from RBZ, the audited financial statements and MIX-market data was also used in the research to compliment the primary data.

To answer the research questions, data was analysed using Eviews to produce descriptive inferential statistics. This package was used because of its ability to help researchers to analyse data and facts efficiently (Baum, 2006).

The descriptive statistics to be analysed include the number of observations, mean, standard deviation, maximum and minimum. The correlation analysis tools were carried out to establish the relationships between different variables. The univariate multiple regression method in the framework of panel data was used in this research. The panel data approach was selected because the secondary data contains both time series dimensions and cross section dimensions. Quantitative data will be collected utilizing structured questionnaires from research participants and internet sources. The approach proposed by Rahim et al. will be used to analyse these questionnaires (2011). Eviews is a statistical program that includes both linear regression

and descriptive statistics for data analysis (Rahim et al., 2011: 128), which the researcher plans to employ

For the qualitative data technique, data from questionnaires and interviews will be processed, analysed, and performed utilizing tables and graphs as statistical models. The data will be converted to an understandable format so that comparisons of research questions and gathered questions and data can be made. This means that the information to be gathered will be condensed into manageable summaries and displayed in tables and graphs.

3.10 Dependent and independent variables discussion

The aim of the part of the research is to describe dependent and independent variables to be used to answer the research questions. Sustainability is the ability of an MFI to cover operating costs using the operating revenues generated from the operations of an MFI (Woller, 1999).

The literature and MIX-market provide several variables which can be used to measure profitability but this research was limited to the following variables to answer research questions in the context of MoneyMart Microfinance.

- Capital Structure. - Interest Rates
- Number of Active Borrowers - Average Loan Size
- Staff Cost - Percentage of Female Borrowers
- Portfolio on Risk (30 days) - Yield on gross portfolio
- Size of the MFI - Operating expenses ratio
- Number of borrowers per Staff

The aforementioned factors were chosen for inclusion in the proposed regression models because these were identified as factors that are likely to have impact on sustainability and trade-off between sustainability and outreach.

3.11 Regression models

The researcher used unbalanced panel regression analysis model with a six-year time period. According to Gujarati (2003), the panel data is the combination cross section and time of the

set of data collected over some time. The panel regression model was selected because the method can detect and measure the effects that cannot be detected by using pure cross-section and time series data (Wooldridge, 2006; Greene, 2003; Gujarati, 2003). In addition, the panel data also gives the informative, variability and more degree of freedom among the variables.

The general form of panel regression analysis was specified as follows:

$$Y_{it} = \alpha_i + \beta' X_{it} + \epsilon_{it} \text{-----}$$

----- (3.1)

Where Y_{it} – It represents dependent variable which measures financial sustainability, α_i – A constant term and a vector of MFIs' specific variables which were observed, β - *Measures the partial effect of* X_{it} , X_{it} – It represents the explanatory variable, ϵ_{it} – It represents the error term. On the Financial sustainability, the researcher used profitability.

Following Nyamsogoro (2010), who did a research on financial sustainability of rural microfinance in Tanzania, this research uses linear regression model which has the following form as shown below:

$$FSS_{it} = \alpha_i + \beta_1 capstrucfs + \beta_2 intratefs + \beta_3 ROA + \beta_4 ROE + \beta_5 lnborrowersfs + (3.2)$$

We use the two panel methods fixed and random effects which controls for endogeneity problem caused by omitted variables. The fixed effect model is useful when controlling for variables that are constant over time, but they differ between cases while the random effect model is useful when controlling for variables which vary across time and across cases (Brooks, 2008). We conducted Hausman test to identify which estimation model between random and fixed effect is the best estimation model for the study models.

3.12 Estimation procedure

The error correction mechanism (ECM) developed by Engle and Granger is a means of reconciling the short-run behaviour of an economic variable with its long-run behaviour (Gujarati, 2004). If a set of variables are all $I(1)$, between them there may be one or more equilibrium relationships which is verified by using the Johansen-Juselius Maximum Likelihood co-integration technique. In Economics, error correction models are used to show how the previous period's deviation from the long run equilibrium is adjusted for in the short

run. Econometric views (Eviews 7.010) software program was used to process and estimate all the collected data.

To estimate our model, equation (3.0) is then expressed as a dynamic autoregressive distributed lag (ARDL) model as follows;

$$X_t = \alpha + \beta_1 X_{(t-1)} + \beta_2 X_{(t-2)} + \beta_3 X_{(t-3)} + \dots + \beta_k X_{(t-k)} + \mu_t \dots \dots \dots (3.3)$$

Where $X = [\text{NUMBER OF CLIENTS, ROE, ROA, DISBURSEMENT SIZE}]$ such that if we compress equation (3.1), we get

$$X_t = \alpha + \sum_{j=1}^k X_{t-j} + \mu_t \dots \dots \dots (3.4)$$

We then transform the equation to be in a more parsimonious VECM form by subtracting X_t from both sides of the equal sign and add the error correction term so as to obtain;

$$\Delta X_t = \alpha + \Pi X_{t-1} + \sum_{j=1}^k \Gamma \Delta X_{t-j} + \phi ECT_{t-1} + \mu_t \dots \dots \dots (3.5)$$

Where:

Δ = the first difference operator

X_t = $K \times 1$ dimensional vector of non-stationary $I(1)$ endogenous variables of the model

α = $K \times 1$ dimensional vector of constant

μ = k -dimensional vector of the stochastic error term normally distributed with white noise properties $N(0, \sigma^2)$

Π = long run matrix that determine the number of cointegrating vectors that consists of α and β representing speed of adjustment towards long run equilibrium and long run parameter respectively

Γ = vector of parameters representing the short-term relationship

ϕ = error correction coefficient which is expected to be negative between 0 and 1, and significant at least at 5% level

The short run phenomenon provides short run dynamics among the variables (Lutkepohl, 2007).

3.13 Diagnostic tests

3.13.1 Unit root test

Gujarati (2008) assert that unit root test can be used to test for stationarity of the variables in the model. To avoid spurious regression where the outcome can appear as if there are correct and impressive yet they mislead in decisions making. The researcher applied the Augmented Dickey Fuller (ADF) test to check the stationarity of the time series data. According to Dick and Fuller (1979), the null hypothesis of unity root is not accepted if the ADF statistic is less than 0.05. Time series is considered to be stationary if expectation of X [$E(Xt)$], Variance of X [$Var(Xt)$] and Covariance of X [$Cov(Xt)$] absolutely constant. Non stationary variables are made stationary by first order difference, which is $I(1)$. In this case we do not reject the hypothesis that capital structure has an impact on MFIs financial performance if the critical values are greater than the t statistic from ADF.

To be free from computing false and unreliable results that come from using time series data, different tests need to be done. This study makes use of the classical linear regression diagnostic tests which include; normality test, correlation test, unit root test and co-integration test.

3.13.2 Co-integration test

Maddala (1998) argue that co-integration is a situation in which variables in the model have a long run association, they do move together in the long run. The hypothesis state that the null hypothesis is characterized by the variables which are co-integrated. In this research, given all the variables are found to be integrated of order one, then the Johansen co-integration test shall be used. If the variables are a fusion of $I(1)$ and $I(0)$, then the ARDL Bounds test shall be used instead. Maximum Eigen values and the trace test will be considered to indicate the presence of a long run relationship.

3.13.3 Classical linear regression diagnostic testing

Before going too further into time series econometric procedure, the first issue is test of the assumption of classical linear regression model (CLRM). For us to trust any of the results that will come from this research it is important to identify if the variables stated in this research

are not in any way violating the axioms under (OLS). Therefore, these are checked by testing each of the underlying assumptions.

3.13.4 Heteroscedasticity Test

According to Dougherty (2008), heteroscedasticity is a situation where there is no equal variance of the variables in the model. This is a violation of an econometric assumption of equal variance among variables which is known as homoscedasticity. In the model there is evidence of not accepting the null hypothesis where the test statistic is greater than the critical value from chi-square distribution. Alternatively, the hypothesis used Breusch-Pagan Godfrey test where the impact of capital structure on financial performance is not rejected at 5% level of significance, if the Chi-Square is above 0.05 (Maddala, 1998). Using the hypothesis that we do not reject null hypothesis where the variance of error term is constant, otherwise we reject.

3.13.5 Normality test

This assumption states that the error term is normally distributed that is $U_t \sim NID(0, \sigma^2)$ and it is required in order to conduct single or joint hypothesis test about the model parameters. One of the most commonly applied tests for normality which was used for this research is a histogram which depicts the distribution of the residuals. Alongside, the Jacque-Bera joint probability will be recognised since we are worried about normality of residuals.

3.13.6 Model specification tests

The coefficient of determination (R-squared) will be employed in this model to measure its goodness of fit. It is a summary measure that tells how well the sample regression line fits the data. The R-squared is a nonnegative quantity whose limits are $0 \leq R^2 \leq 1$. An R^2 of 1 means a perfect fit, that is, $\hat{Y}_t = Y_t$ for each t . On the other hand, an R^2 of zero means that there is no relationship between the regress and the regressors. In addition, the F statistic shall be used to draw conclusions over joint significance of the model.

3.14 Research Ethics: Key Considerations

A study should be sensitive to vulnerable respondents and respect power inequalities by avoiding putting them at risk. These are the guidelines that govern the research process. Data collection was done with informed consent to ensure that research ethics are upheld. The respondents were assured that information gathered would be only be utilized for academic purpose so as to protect secrecy the respondents were advised not to write their names.

3.15 Chapter Summary

The Chapter looked at the research design used by the researcher in carrying out the study. The target population and sampling procedure were also defined in the Chapter together with the sampling techniques employed. Data sources and econometric models used in the research were also outlined in the Chapter. The Chapter looked at data collection methods and instruments and lastly data presentation and analysis plan. The researcher was fully convinced that if the above methodology was used, it was going to yield unbiased results holding other things constant the reliability and validity of the data presented.

CHAPTER 4

DATA PRESENTATION AND ANALYSIS

4.0 Introduction

The interpretation and introduction of the study outcomes taken from the region are explored in this chapter. In addition, this chapter provides background information and consequences for each responded based on the research topic. The chapter also gives attention to the model estimation and presentation of the significance of the model. The data used was summarized and treated using E-views 7. The result presented includes summary of the original outcomes obtained from E-views in testing for the statistical impact of COVID-19 on the performance of Financial Institutions and results of the diagnostics tests.

4.1 Rate of response

The response rate refers to the percentage of survey participants that replied to the survey (Baruch, 1999) cited in (Mugenda & Mugenda, 2012). From the study, 50 respondents were the total population but 26 were the target sample. Furthermore, only 21 of the 26 respondents who obtained the questionnaire completed and returned it, resulting in a response rate of 80 percent. It is regarded suitable to reach conclusions; according to (Babbie, 2010), the study requires a response rate of more than 70 percent. (Mugenda & Mugenda, 2012) concurred, noting that a response rate of 50 percent or greater is usual when conducting a survey. Consequently, an 80 percent response rate is adequate to conclude the analysis.

4.2 Main Discoveries

The main determination of this study was to investigate the effects of COVID-19 on the performance of Financial Institutions in Zimbabwe. Statistics are based on scales used in the questionnaire. The findings have been presented according to the following objectives:

4.2.1 The impact of Covid-19 has on the performance of Financial Institutions.

Portfolio at Risk means the outstanding principal balance of all loans having an amount overdue as a percentage of outstanding principal portfolio. From the research prepared, MoneyMart Finance maintained a percentage ranging from 8% to 15% from the year 2015 to 2019. It increased to 35% during the Covid-19 pandemic (that is a 20% increase showing that the pandemic had a negative effect on the yield to gross on portfolio) as they had cash tied up in clients who were not able to pay back the borrowed loan. In line with the study by

Mwakabumbe, (2013), Microfinance institutions play a critical role in economic growth due to its focus on low income earners in the society and poverty eradication objective. They help those in informal sectors to thrive in their businesses (S.M.E's). These being the financial institutions clients they were also affected the most by the pandemic which led to financial institutions performance being affected as they could not sustain to pay back their borrowed loans.

As discovered by Ozili, (2020) that Covid-19 has negative impact on all sectors of the industry including the financial sector and S.M.E sector which comprised the major composition of Nigeria's economy. More so another study corroborated by (Chagonda, 2020) who shared similar sentiments by arguing that COVID-19 lockdown in Zimbabwe made it difficult for the informal economy because most dealers were subsistence traders who were already poor. MoneyMart Finance loan cost per each loans officer increased as it was difficult to move from one place to another to collect repayments because of the lockdown.

Covid-19 had a negative impact on MoneyMart finance as it affected its Loan size (that is the number of active borrowers the institution has). It was reduced as a lot of clients dropped out as they could not afford to apply for a new loan given the fact that the nation was under lockdown (no supply of raw material or stock also customers to sell their products to). It increased the institution staff cost and also cost some of the staff members' jobs as they had to close some of its branches and had some workers work from home.

Apart from PAR, there was a reduction in outstanding loans (which affected average loan size, size of the MFI, number of borrowers per staff also the staff costs) due to lower disbursements. It was impossible for MoneyMart finance staff to meet up with clients in person in order to collect repayments also to market the loan product so as to acquire new clients for disbursements and some staff members were working from home and others were retrenched which affected the number of borrowers per staff. There were also complications in disbursing the loans as some clients were dropping out because their businesses were no longer functioning well as expected, some died and some become insolvent (which led to MoneyMart finance to write off some of these default loans as they were beyond recovery). These reduced the number of active borrowers, staff cost and the size of the company as there were reduction in disbursements and lower repayments to sustain the institution.

4.2.2 The challenges associated with COVID-19 to Financial Institutions.

After surveying a number of participants through questionnaires; loans officers and the managerial team responded saying that:

Following these restrictions, it increased the operating expense also the yield on gross portfolio of MoneyMart finance. That is, it was now difficult to travel and collect repayments so staff transport costs increased as they had to hike private cars (if they are lucky to find one) from one area to another so as to collect loan repayments. Which also ended up increasing the Portfolio at risk (yield gross portfolio) as some repayments will reach their expiring date yet there was no means of collecting them and others being missed because some clients had shut down their businesses and the had nowhere to sell their products also they had no supply of them as the borders were closed and travelling was restricted. This ended MoneyMart finance with a number of clients or loans in default which they ended up writing off some of them as they could not recover their instalments. Also some of their clients were caught up by the virus and died during the pandemic leaving them with no option but to write of the loan since it was beyond recovery (this affected their income at most as the funds or cash flows were not circulating as presumed).

When a loan is disbursed (issued or given to a client) the next thing that is expected a repayments collected from the instalments paid back which will help another client in their daily activities. These collections will help the institution to function well in covering their day to day expenses as well but when the lockdown was implemented it affected the; average loan size, staff costs and number of borrowers per staff, in the sense that they were a few clients left in the market who were still borrowing money from the institution. This reduced the loan book of MoneyMart finance by a greater percentage as the number of active borrowers were reduced as clients could not withhold or borrow funds as their businesses were not function well. It was nearly impossible to acquire new clients (done through marketing) because people were not allowed to gather also there were travelling restrictions.

Table 4.2.2.1 Statistics showing the effectiveness of COVID-19 measures within the financial sector

<i>Statement</i>	<i>Ineffective</i>	<i>Effective</i>
Lockdown rules	42.5%	57.5%

Social distancing	12.5%	87.5%
Intercity travel bans	97.5%	2.5%
Quarantining	35%	65%

Hassan et al (2020), revealed that the Coronavirus pandemic has caused most businesses to prioritize demand collapse, increased uncertainty and supply chain disruption. The closure of borders and intercity travel bans together with shutdowns of market places in Zimbabwe affected normal business operations of S.M.E's which are the biggest clients or which holds almost three quarters of microfinance's clients' portfolios unlike for larger and corporate firm which mainly cringed on technology to these minimal disruptions in supply chain processes.

As shown by the table above; lockdown rules, social distancing and quarantining are most effective measures of combating the spread of Covid-19 within the financial sector. However, some respondents did not find the intercity travel bans an effective measure of alleviating the spread of the virus instead it affected business operations negatively. In a study (Zamachiya et al., 2020) revealed that national lockdown had a negative effect on the economy's activities.

Covid-19 came along with many challenges that affected the financial sector unexpectedly. Shaffi et al., claimed that S.M.E's, microfinance institutions was at risk of going bankrupt and shutting down altogether after three months' dues to supply chain interruptions and lockouts (as these two work hand in hand in the industry). A lot of microfinance institution ended up cutting or shutting down some of their branches and closing the company completely because they could not operate or function very well as they were affected by the pandemic so badly, he likes THRIVE microfinance.

4.2.3 Mitigatory strategies employed by Micro Finance Institutions during the Covid-19 crises.

During the pandemic it was a difficult time to manage the operating costs, staff costs, disbursement size, the number of clients and the portfolio at risk. MoneyMart Finance implemented a few strategies to survive. As studied by (Thukral, 2021), he led to a conclusion that conserving profits can help offer a buffer during difficult times. It also produces funds for

investments in the technologies and skills needed to innovate and adapt to change. More so (Pu et al., 2021) stipulated that public policy can play a role in promoting small business resilience, for example, by financing risk-mitigation technologies and supporting economic and trade diversity. (Huang et al., 2021) revealed that small firms will benefit from strategies that improve resilience, which is why some companies go even farther and create extremely dynamic, innovative, and flexible business cultures.

MoneyMart finance have implemented four ways as mitigatory strategies to curb Covid-19 challenges which are; Leniency to clients, Reduction in lending, Flexible staffing arrangements and Reaching out to Microfinance Associations. In adverse economic situations, the borrowers' resilience to the challenging pandemic depends on the types of economic activities they are engaged in, rescheduling of principal payments, subsidization of interest rates, and extension of moratorium period (Bull & Ogden, 2020; Singh & Sharma, 2020). This study is in line with MoneyMart being lenient to clients, they restructured their loans in response to the pandemic to offer some breathing room to borrowers who may have lost all or part of their incomes. Payments plans on instalments were discussed with the clients which they were suitable with (that will not choke their business income also the institution).

To insure a sustainable operation and governance of the institution's cash flows MoneyMart finance reduced its lending. Reason being there was low demand from clients borrowing, increased riskiness in clients (that is the portfolio at risk-amount of loans in arrears), writing off some loan in default (due to insolvency of clients and death occurrence during the pandemic) and to generally hoarding cash to meet an uncertain future. This helped MoneyMart finance as they were able to sustain their cash flows, expenses and to survive in the industry during the pandemic.

In a study (Zamachiya et al., 2020) revealed that national lockdown had a negative effect on the economy's activities. Following the pandemic restrictions, MoneyMart finance came to terms of having a flexible staffing arrangements which are; closing some branches which were not performing well, laying some staff members off and having a schedule of others coming to work on certain days whilst others were working from home (so as to cut off some costs in order to keep on running the institution).

Financial institutions like microfinances has Associations that help them in terms of investment funding for example in Zimbabwe we have ZIMBABWE ASSOCIATION OF MICROFINANCE

INSTITUTIONS (ZAMFI). MoneyMart finance happens to be in partnership with ZAMFI, which was an added advantage to them as they managed to some funds from investor to disburse loans whilst their recovering their tied up cash from previous disbursed loans from their clients whose income was affected by the pandemic.

In addition, (Dominci, 2021) suggested that making firms more shock-resistant while also increasing their internal and external links would help the economy as a whole. Hence in this study it has been noticed that most of the respondents opined that digitising social media had a positive bearing on making sure microfinance institutions remained in business even in the future where pandemics like Covid-19 erupted. In essence the pandemic taught businesses that they should be agile and ever ready of such eruptions as they affected business operations.

4.3 Summary Statistics

4.3.1 Descriptive analysis

The Jaque-Bera test for normality which tests the null hypothesis that variables are normally distributed against an alternative that they are not normally distributed shows that return on equity and return on assets are normally distributed because the p values are greater than 0.1 hence we fail to find evidence to reject the null hypothesis. However, the other two variables are not normally distributed.

	DISBURSEMENT_SIZE	NET_PROFIT	NUMBER_OF_CLIENTS	RESID	ROA	ROE
Mean	548407.7	109681.5	585.5000	NA	0.491927	0.505084
Median	659222.5	131844.5	525.0000	NA	0.584512	0.463157
Maximum	746725.0	149345.0	1114.000	NA	0.981575	0.998411
Minimum	145000.0	29000.00	211.0000	NA	0.055918	0.007091
Std. Dev.	214506.6	42901.31	259.3821	NA	0.291271	0.293138
Skewness	-0.915779	-0.915779	0.302612	NA	0.035475	0.044533
Kurtosis	2.176979	2.176979	1.945874	NA	1.732034	1.898829
Jarque-Bera	5.375953	5.375953	1.969971	NA	2.150362	1.627348
Probability	0.068018	0.068018	0.373445	NA	0.341236	0.443227
Sum	17549045	3509809.	18736.00	NA	15.74167	16.16268

Sum Sq. Dev.	1.43E+12	5.71E+10	2085652.	NA	2.629998	2.663830
Observations	32	32	32	0	32	32

Source: Own estimation using Eviews 7

4.4 Diagnostic Tests

4.4.1 Heteroskedasticity Test

This occurs where the variances of the error term under study are not equal. The presence of heteroskedasticity increases the risk type II error. As such the ARCH heteroscedasticity test was conducted.

F-statistic	3.651576	Prob. F(4,27)	0.0167
Obs*R-squared	11.23392	Prob. Chi-Square(4)	0.0241
Scaled explained SS	29.74941	Prob. Chi-Square(4)	0.0000

Source: Own estimation using Eviews 7

Under the null hypothesis that there is homoscedasticity against an alternative that there is heteroskedasticity, we fail to find evidence to reject the null hypothesis since the P value is greater than 0.1. The above table is showing that there is no autoregressive conditional heteroskedasticity (ARCH) element in the residuals hence homoscedasticity.

4.4.2 Correlation: multicollinearity

	DISBURSEMENT_SIZE	NET_PROFIT	NUMBER_OF_CLIENTS	ROA	ROE
DISBURSEMENT_SIZE	1	1	0.371936	0.070519	0.139326
NET_PROFIT	1	1	0.371936	0.070519	0.139326
NUMBER_OF_CLIENTS	0.371936	0.371936	1	-0.135915	0.074034
ROA	0.070519	0.070519	-0.135915	1	0.358811
ROE	0.139326	0.139326	0.074034	0.358811	1

Source: Own estimation using Eviews 7

The above table shows the correlation between the explanatory variables used in this study. The relationship between all the variables is below 0.8 which means that there is no perfect linear relationship among explanatory variables. This implies that our data is not suffering from multicollinearity

4.4.3 Regression results

Dependent Variable: NET_PROFIT

Method: Least Squares

Date: 06/04/22 Time: 16:57

Sample: 1 32

Included observations: 32

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	28686.76	15902.59	1.803905	0.0824
DISBURSEMENT_SIZE	0.161880	0.022374	7.235195	0.0000
NUMBER_OF_CLIENTS	-7.110065	20.76916	-0.342338	0.7347
ROA	22608.00	16977.29	1.331661	0.1941
ROE	-19181.60	16493.14	-1.163005	0.2550
R-squared	0.707543	Mean dependent var		111442.3
Adjusted R-squared	0.664216	S.D. dependent var		43958.16
S.E. of regression	25472.36	Akaike info criterion		23.27118

Source: Own estimation using Eviews 7

Considering a high R squared of 0.707543, we can conclude that the model is correctly specified. This implies that about 71% of variations in capital structure are explained by the explanatory variables and only 29% are in the error term. Taking the loss of degrees of freedom into account as well we realize that the model still is fit in explaining variation in capital structure because of the high adjusted R-squared of 0.664216.

4.5 Interpretation and discussion of results

4.5.1 Return on equity

The long run model shows that return on equity is positively and non-significantly influenced by equity in the long run. The case is however different in the short-run since return on equity is significantly influenced any change in capital structure in both lagged periods. This is possibly because management may be making poor decisions in reinvesting capital into the business of microfinance.

4.5.2 Return on assets

It has a negative impact on the number of clients, this is because during the Covid-19 pandemic a number of clients dropped out or stopped borrowing from the institution as they were insolvent, their business was no longer functioning well and some could not afford the cost of borrowing. However, it has a positive impact on disbursement size, net profit and return on assets as the microfinance institution managed to maintain these during the pandemic by implementing strategies that helped them survive the pandemic.

4.5.3 Net profit

It works hand in hand with the number of disbursements in an institution. Net profit is used to measure the performance of financial institutions and it is obtained from the disbursement size. As shown on the table it has a positive impact and its yielding the same results (1), meaning to say disbursement size has a greater impact on net profit. Net profit also has a positive impact on the number of clients, return on assets and return on equity.

4.5.4 Disbursement size

The results show that there was a positive impact of the disbursement size with other variable used to measure the performance of Financial Institutions. That is even though the pandemic had a negative effect, lending never stopped for microfinance institutions as people were in need of funds to survive the pandemic. This kept the institutions performing because they kept on disbursing funds during the pandemic.

4.5.5 Number of clients

There is a negative relation between the number of clients and return on assets, which clearly shows that Covid-19 had a greater impact on these variables. However, there were positive impacts with the disbursement size, net profit and return on assets.

4.6 Chapter Summary

In this chapter, estimations were done and the regression results interpreted. Based on the findings, we will outline the policy recommendation in the next chapter thereby summarizing the whole study.

CHAPTER 5

CONCLUSIONS AND POLICY RECOMMENDATIONS

5.0 Introduction

This chapter presents a summary of the whole study and provides a conclusion to the study's findings. The chapter also highlights the recommendation of the study in general, recommendation for future studies and the chapter summary. Areas for further research will be discussed in this chapter also.

5.1 Summary of the study

The current study focused on the impact of COVID-19 on the performance of financial institutions (microfinance institutions) in Zimbabwe, the first chapter mainly highlighted the background of the study from which the study was drawn, the problem statement that ignited interest in the current study, the research objectives and hypothesis that was used in the whole research. The second chapter was mainly aimed at bringing out a review of related literature, that is other studies carried out, existing text and journals on the subject matter or those related to the current research study that other authors have carried out, in chapter three, the research methodology was clearly illustrated and it is from this chapter that the research procedure was explored in detail. Chapter four presented the results of findings as a follow up to the research procedure stated in chapter three, the diagnostic test which includes normality tests, serial correlation test and heteroskedasticity test were utilized and results presented in this chapter, the researcher further went on to give interpretation of these results in the same chapter. Chapter five which is the final and last chapter under this study highlights the conclusions made within the current study and policy recommendations based on the findings of this study on the impact of COVID-19 on the performance of financial institutions (microfinance institutions) in Zimbabwe.

5.2 Conclusion of the study

This study has examined the impact of COVID-19 on the performance of financial institutions (microfinance company) in Zimbabwe for the period of 3 years. Time series data was collected from 2019 to 2021. To check the stationarity of the series ADF unit root test has been applied. Furthermore, co-integration test has been used to examine the long-run relationship between the dependent and independent variables, therefore, the co-integration test revealed that; there

exists a long-run relationship among the variables between number of clients, disbursement size, ROE, ROA and Net Profit.

The study sought to determine the impact of Covid-19 on the performance of Financial Institutions in Zimbabwe and in this regard, the findings of this study there is a negative impact. This is because microfinance business was perceived to high risk and investors were less hopeful of possibilities of productivity and consequently being careful of investing in microfinance business. Shareholders cited adverse yields commencing the industry due to inflations and some microfinance institutions lack collateral to secure loans from banking institutions. Also it resulted in job losses and closure of some micro and small businesses that are the main clients of microfinance institutions. The pandemic also retarded the progress that microfinance institutions had made in terms of access to financial services and women empowerment in precise.

Another objective that the study sought to fulfil was to point out the challenges associated with Covid-19 to Financial institutions in Zimbabwe. The researcher focused on microfinance institutions. When the lockdown was implemented financial institutions suffered from high operating costs, loss of revenue due to reduced landing, cash flow constraints, inability to disburse loans, non-repayment loans, client incapacitation and outreach challenges.

Lastly the researcher sought to determine the strategies employed by microfinance institutions during the Covid-19 crises. The results suggested that in order to minimize the impact of Covid-19 pandemic on business continually, microfinance institutions implemented these strategies; digitalization of operations (that is accepting online applications to avoid human contact), closure of branches (to cut down on costs and retrenchment of workers), introduction of work schedules (to decrease number of staff in workplaces and to cut down staff costs), reducing loan tenure and lending (so as to manage repayments and only disbursing to repeat clients) and suspending penalty on loans so as to assist clients.

5.3 Recommendations of the study

Improvement Partners: One basic region that accomplices can play is a functioning job particularly those from the European Union is to connect the area with private financial backers in their separate nations decisively. ZAMFI as the zenith body for microfinance organizations is ready to be the connection to such endeavours. Coronavirus pandemic in our view requires monetary alleviation as the two awards and advances consequently such help from our European accomplices is a lot of gladly received, expected and anticipated. ZAMFI is of the

conviction that the Central Bank has set up an adequate number of administrative issues for Zimbabwe to turn into a decent objective for microfinance venture.

Microfinance Institutions: It was very apparent from the review discoveries that the old model of blocks and concrete as far as branch network is not any more applicable and worth putting resources into for most of MFIs particularly those actually quick to stay practical and productive in the loaning industry. The main worthwhile and suitable choice is to embrace advanced administrations stages related with costs decrease, restricted human to human collaboration, effectiveness in help conveyance and high efficiency. Foundation of specialist organizing frameworks particularly for country populace could be a distinct advantage for some MFIs ready to help formative loaning among them little holder ranchers. The Covid-19 pandemic circumstance is probably going to be with us for an extremely significant stretch of time until a genuine leap forward in immunizations and medications for its treatment is found. Hence, the security of wellbeing for cutting edge staff at work environment included generally in assortment of remarkable credits, incorporating senior administration entrusted with vital initiative of the organization will stay a first concern. Portfolio quality is probably going to stay a test and as such MFIs ought to be adaptable in rescheduling existing credits while simultaneously organizing new advance arrangements in a way that assists clients with effectively reimbursing their credits.

Government: It was indeed obvious from the study that macroeconomic unsteadiness particularly at it connects with high expansion and unpredictable conversion standard has contributed adversely to monstrous decrease of MFIs upsides of value and productivity. The onus and undertakings stays then on the shoulders of government to re-establish soundness on financial markers completely. This must be finished through involving its full weight of shrewdness and authority in concocting solid arrangements and down to earth estimates that have ability to deliver all around planned and great positive results on the area and economy overall.

Microfinance Association: Nowadays it is the ideal opportunity for collaboration among players in the business through enrolment to the microfinance affiliation which thus ought to have the option to organize endeavours of campaigning and promotion for issues of normal interest and desires for the entire area. A reasonable model that was made obvious by the overview is issue around subsidizing of the area. There is need, proceeding for new and imaginative ways beyond conventional money designs to be investigated with direness and

essentialness. An immediate connection of the relationship with private value financial backers could be one among numerous accessible choices to be sought after by the affiliation. The affiliation could extend its administrations to remember financial backers matching administrations for benefit of the MFIs. The choice of looking for subsidizing from either national bank or government through monetary portions ought not be viewed as 'the alpha and omega' of the MFIs just finding road, thus the affiliation and its individuals is presently like never before tested to look for elective confidential area financing choices.

Enrolment: This has been referenced for quite a while and ought to be sped up. The National Microfinance Policy articulation sets up relationship and commitments of a summit body. While the reaction pace of this study at 30,9% is as yet delegate, a higher figure might have been achieved in the event that all experts felt ordered to be directed on occasion by the Association. An Association isn't a power and now and again it needs designated power and support in performing specific responsibilities particularly in the midst of disasters and pandemics where turf recognizable proof and assurance becomes superfluous. Job duplication ought to be distinguished and destroyed. All MFIs ought to turn into an individual from a relationship for simplicity of correspondence and sending. The aftereffects of non-coordination are not charming to envision.

Basic significance of the area: Although this can be exchanged words at other fora, the area is confounded that while the area was extremely certain that subsidizing bailout was fundamental, there was no immediate distribution or reaction to May Day trouble signals. Competitors, footballers, artists, casual areas, the travel industry were recognized as key areas and got rescued. The MFI area is yet to be recollected. Political pursuit while starving on occasion is the start of self-destruction.

5.4 Recommendation for future study

There are some limitations of this study which future studies can seek to address; firstly, it studies the data of only one microfinance institution in a developing economy so it cannot represent all the markets of transition economies. Secondly this study includes only 3 years' data. To explore consistent results long time series of data could be required. Thirdly we can find the impact of Covid-19 on the performance of financial institutions by sector and then compare the results to know the real picture of the relationship. Covid-19 remains a puzzling concept especially so in emerging markets like Zimbabwe. Further studies can be conducted by adding breadth of outreach and business risk as independent variables and portfolio quality

and PAR as dependent variables. To clarify the results of our study more variables for performance measurement may be useful. Data of long time series could also be used for credibility of results. Future research can be processed by comparing the financial performance of small and large firms, other sectors of the economy such as mining and telecommunication industry.

5.5 Chapter Summary

This chapter summarized the research findings and presented the conclusion referring back to the objectives of the research study, which were to ascertain the impact of Covid-19 on the performance of financial institutions, to examine the challenges associated with Covid-19 to financial institutions and to establish effective mitigatory strategies employed by microfinance institutions during the Covid-19 crisis. This chapter aimed at highlighting the conclusion of the whole study. Possible recommendations were put forward which can be implemented and can effectuate the development of the Zimbabwean microfinance sector. Additionally, the chapter also outlined the recommendations with regards to areas for further research; these recommendations have been drawn from the findings as guided by the main research objectives. Lastly this chapter provided a brief summary of the last and final chapter of the current research study on the impact of COVID-19 on the performance of financial institutions (Microfinance institutions) in Zimbabwe between 2019 and 2021.

REFERENCES

- Adusei, M. (2021). Interest Rate and the Social Performance of Microfinance Institutions. *The Quarterly Review of Economics and Finance*
- Almaqtari, Faozi A., Eissa A. Al-Homaidi, Mosab I. Tabash, and Najib H. Farhan. 2019. The Determinants of Profitability of Indian
- Barasa, E., Mbau, R. and Gilson, L., 2018. What is resilience and how can it be nurtured? A systematic review of empirical literature on organizational resilience. *International journal of health policy and management*, 7(6), p.491.
- Barua, Bipasha, and Suborna Barua. 2020. COVID-19 Implications for Banks: Evidence from an Emerging Economy. *SN Business & Economics* 1: 19. [CrossRef]
- Barua, S. (2020). Understanding Coronanomics: The economic implications of the coronavirus (COVID-19) pandemic. *Available at SSRN 3566477*.
- Baum, C. F., Schaffer, M. E. and Stillman, S. (2003) Instrumental variables and GMM: Estimation and testing. *Stata Journal* 3: 1–31.
- Baum, C. F., Schaffer, M. E. and Stillman, S. (2006) Instrumental variables and GMM: Estimation and testing. *Stata Journal* 3: 1–31.
- Bhatti, A., Akram, H., Basit, H. M., Khan, A. U., Raza, S. M., & Naqvi, M. B. (2020). E-commerce trends during COVID-19 Pandemic. *International Journal of Future Generation Communication and Networking*, 13(2), 1449-1452.
- Boateng, Kwadwo. 2018. Determinants of Bank Profitability: A Comparative Study of Indian and Ghanaian Banks. *Journal of Emerging Technology and Innovative Research* 5: 1–12.
- Breuer, A., Leininger, J., & Tosun, J. (2019). *Integrated policymaking: Choosing an institutional design for implementing the Sustainable Development Goals (SDGs)* (Discussion Paper 14/2019). Bonn: German Development Institute / Deutsches Institut für Entwicklungspolitik (DIE).
- Chagonda, T. (2020, 12 April). ‘Zimbabwe’s shattered economy poses a serious challenge to fighting COVID-19.’ *The Conversation*. [Article]. <https://theconversation.com/zimbabwes-shattered-economy-poses-a-serious-challenge-to-fighting-covid-19-135066>

Commercial Banks: A Panel Data Approach. *International Journal of Finance & Economics* 24: 168–85. [CrossRef]

Craven, M., Liu, L., Mysore, M., and Wilson, M. (2020). COVID-19: Implications for Business. Executive Briefing, COVID-19: Briefing note, McKinsey & Company. Retrieved from <https://www.mckinsey.com/business-functions/risk/our-insights> 10 January 2022.

Creswell, J. W., 2007. *Qualitative and Research Design*. UK: Publications incorporation. Gall, C. (2009) *Education Research an introduction*, 9th edition, New York, Longman.

Damak, Mohamed, Cynthia Cohen Freue, Geeta Chugh, Natalia Yalovskaya, Ming Tan, Ivan Tan, Sergio Garibian, Tatiana Lysenko, and Elijah Oliveros Rosen. 2020. *Banks in Emerging Markets*. New York: Standard & Poor's Financial Services.

Demirguc-Kunt, A., Pedraza, A., & Ruiz-Ortega, C. (2021). Banking Sector Performance During the COVID-19 Crisis. *Journal of Banking & Finance*, 133, 106305. <https://doi.org/10.1016/j.jbankfin>. 2021.106305

Dickey, D. a. F., 1979. “Distribution of the Estimators for Autoregressive Time Series with a Unit Root”. *Journal of the American Statistical Association*, pp. 74:427-431.

Dominici, G. 2017. Governing business systems: Theories and challenges for systems thinking in practice. *Systems Research and Behavioral Science*, 34, 310-312. doi:10.1002/sres.2454

Dougherty, C. (2008), “introduction to Economics,” Oxford, UK

Elnahass, Marwa, Vu Quang Trinh, and Teng Li. 2021. Global Banking Stability in the Shadow of Covid-19 Outbreak. *Journal of International Financial Markets, Institutions and Money* 72: 101322. [CrossRef]

Fatoki, O. (2018). The impact of entrepreneurial resilience on the success of small and medium enterprises in South Africa. *Sustainability*, 10(7), p.2527.

Gujarati N. D, 2004. *Basic Econometrics*. Fourth Edition. New Delhi: Tata McGraw-Hill publishing.

Hamidi, D.Y. (2018). Building dynamic capabilities—chairperson's leadership, knowledge and experience in SMEs. In *The Dynamics of Entrepreneurial Contexts*. Edward Elgar Publishing.

Hanifah, H., Halim, H.A., Ahmad, N.H. and Vafaei-Zadeh, A. (2019). Emanating the key factors of innovation performance: leveraging on the innovation culture among SMEs in Malaysia. *Journal of Asia Business Studies*.

Hermes, N., & Hudon, M. (2019). Chapter 10. Determinants of the Performance of Microfinance Institutions: A Systematic Review. In *Contemporary Topics in Finance: A Collection of Literature Surveys* (pp. 297-330). Hoboken, NJ: Wiley.

Hu, S., & Zhang, Y. (2021). COVID-19 pandemic and firm performance: Cross-country evidence. *International Review of Economics & Finance*, 74, 365-372. <https://doi.org/10.1016/j.iref.2021.03.016>

Huang, A. and Farboudi Jahromi, M., 2021. Resilience building in service firms during and post COVID-19. *The Service Industries Journal*, 41(1-2), pp.138-167.

International Finance Corporation. (2014). *The impact of Covid-19 on the water and sanitation sector*. Retrieved from https://www.ifc.org/wps/wcm/connect/126b1a18-23d9-46f3beb7047c20885bf6/The+Impact+of+COVID_Water%26Sanitation_final_web.pdf?MOD=AJPERES&CVID=ncaG-hA

Kapoor, K., Bigdeli, A.Z., Dwivedi, Y.K. and Raman, R. (2021). How is COVID-19 altering the manufacturing landscape? A literature review of imminent challenges and management interventions. *Annals of Operations Research*, pp.1-33.

Kozak, S. The Impact of COVID-19 on Bank Equity and Performance: The Case of Central Eastern South European Countries. *Sustainability* 2021, 13, 11036. <https://doi.org/10.3390/su131911036> retrieved on 11 February 2022.

Kraus, S., Clauss, T., Breier, M., Gast, J., Zardini, A. and Tiberius, V. (2020). The economics of COVID-19: initial empirical evidence on how family firms in five European countries cope with the corona crisis. *International Journal of Entrepreneurial Behavior & Research*.

Kushner, T. (2010). A Universal Definition of Small Enterprise: A Procrustean bed for SMEs. World Bank.

Li, X., Feng, H., Zhao, S., & Carter, D. A. (2021). The effect of revenue diversification on bank profitability and risk during the COVID-19 pandemic. *Finance Research Letters*, 43, 101957. <https://doi.org/10.1016/j.frl.2021.101957>

Lutkepohl, H., 2007. Econometric analysis with vector autoregressive models: European University Institute department of economics (EUI) working paper 2007/11

Maddala, G., 1992. Introduction to Econometrics. Englewood Cliffs, N.J.: Prentice-Hall.

Mia, M. A., Lee, H. A., Chandran, V. G. R., Rasiah, R., & Rahman, M. (2019). History of microfinance in Bangladesh: A life cycle theory approach. *Business History*, 61, 703-733. doi:1080/00076791.2017.1413096

Mugenda, O. M. & Mugenda, A. G., 2003. *Research Methods: quantitative and qualitative approaches*. Nairobi, Kenya: Acts Press.

Mwakabumbe C.A, 2013 Effect of capital structure on performance of microfinance institutions: A survey of SACCOSS in Shinyanga municipal council, Tanzania

Okonjo-Iweala, N., Coulibaly, B. S., Thiam, T., Kaberuka, D., Songwe, V., Masiyiwa, S. ...Duarte, C. (2020). *Africa needs debt relief to fight COVID-10*. Brookings. Retrieved from <https://www.brookings.edu/opinions/africa-needs-debt-relief-to-fight-covid-19/>

Ozili, P. K. (2020). Covid-19 pandemic and economic crisis: The Nigerian experience and structural causes. *Journal of Economic and Administrative Sciences*.

Pu, G., Qamruzzaman, M., Mehta, A.M., Naqvi, F.N. and Karim, S. (2021). Innovative Finance, Technological Adaptation and SMEs Sustainability: The Mediating Role of Government Support during COVID-19 Pandemic. *Sustainability*, 13(16), p.9218.

Pu, G., Qamruzzaman, M., Mehta, A.M., Naqvi, F.N. and Karim, S. (2021). Innovative Finance, Technological Adaptation and SMEs Sustainability: The Mediating Role of Government Support during COVID-19 Pandemic. *Sustainability*, 13(16), p.9218.

Rahman, Mohammad Morshedur, Md Kowsar Hamid, and Md Abdul Mannan Khan. 2015. Determinants of Bank Profitability: Empirical Evidence from Bangladesh. *International Journal of Business and Management* 10: 135. [CrossRef]

Ritter, T. and Pedersen, C.L. (2020). Analyzing the impact of the coronavirus crisis on business models. *Industrial Marketing Management*, 88, pp.214-224.

Saunders M et al (2007), *Research Methods for Business Students*, 4th Edition. Pearson Education, Delhi.

Saunders, M.N., Saunders, M and Thornhill, A. (2011) Research methodology for business students, India: Pearson.

Saunders. M, Lewis.P, Amdrian.T, (2009). Research methods for business students, Pearson Education Limited, London. Teece, D.J. (2018). Dynamic capabilities as (workable) management systems theory. Journal of Management & Organization, 24(3), pp.359-368.

Sufian, Fadzlan, and Muzafar Shah Habibullah. 2009. Determinants of Bank Profitability in a Developing Economy: Empirical Evidence from Bangladesh. Journal of Business Economics and Management 10: 207–17. [CrossRef]

Teece, D.J. (2018). Dynamic capabilities as (workable) management systems theory. Journal of Management & Organization, 24(3), pp.359-368.

Thukral, E. (2021). COVID-19: Small and medium enterprises challenges and responses with creativity, innovation, and entrepreneurship. Strategic Change, 30(2), pp.153-158.

Thukral, E. (2021). COVID-19: Small and medium enterprises challenges and responses with creativity, innovation, and entrepreneurship. Strategic Change, 30(2), pp.153-158.

Valackiene & Virbickaite, (2011). *The impact of COVID-19 pandemic on Africa's protected areas operations and programmes*. International Union for Conservation of Nature (IUCN) World Commission on Protected Areas. https://www.iucn.org/sites/dev/files/content/documents/2020/report_on_the_impact_of_covid_19_doc_july_10.pdf Wieser, C., Ambel, A. A., Bundervoet

VU, H.M. (2020). A review of dynamic capabilities, innovation capabilities, entrepreneurial capabilities and their consequences. The Journal of Asian Finance, Economics, and Business, 7(8), pp.485-494.

World Bank. (2020e). *COVID-19 Revenue administration implications: Potential tax administration and customs measures to respond to the crisis*. World Bank Policy Note. Retrieved from <https://openknowledge.worldbank.org/handle/10986/34152>

Zamchiya, P., Mavhinga, D., Gwinji, T., Chamunogwa, A. and Madhuku, C. (2020). Zimbabwe's COVID-19 lockdown: Ensuring the right to food for the poor. Institute for Poverty, Land and Agrarian Studies.

Zamchiya, P., Mavhinga, D., Gwinji, T., Chamunogwa, A. and Madhuku, C. (2020). Zimbabwe's COVID-19 lockdown: Ensuring the right to food for the poor. Institute for Poverty, Land and Agrarian Studies.

Zenker, S. and Kock, F. (2020). The coronavirus pandemic - A critical discussion of a tourism research agenda. *Tourism management*, 81, 104164. doi: 10.1016/j. tourman.2020.104164. Zimbabwe. Intermediate Technology Publications: London.

APPENDIX A: CONSENT FORM

QUESTIONNAIRE TO LOANS OFFICER, MANAGERS AND CREDIT OFFICERS.

Good day! My name is Munashe. I am a final year student pursuing a Bachelor of Commerce Honors Degree in Banking and Finance at the Bindura University of Science and technology. As part of the requirements to complete this degree I am conducting a research titled “**The impact of Covid-19 in financial Institution. A case study of Money Mart Finance**”.

Through the questions in this questionnaire, my research objectives will be achieved. I therefore kindly ask you to complete the questionnaires thoroughly and return it to me. Your cooperation will be greatly appreciated.

All information will be treated with utmost confidentiality and will be used for academic purposes only. Your assistance is greatly appreciated.

Yours faithfully

Munashe

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Cell; +263 785469154

APPENDEX B: QUESTIONNAIRE

SECTION A

INSTRUCTIONS

- 1) Please indicate your response by ticking in the appropriate box

Background information

What is your gender?

☐

Male

☐

Female

What is your age?

- ☐ 20-30 years
- ☐ 31-40 years
- ☐ 41-50years
- ☐ 51 above

What is your educational level?

- ☐ No formal education
- ☐ Primary level
- ☐ Secondary level
- ☐ Diploma and certificate
- ☐ University degree or above

What is the position you hold at MoneyMart Finance?

- ☐ Loans Officer
- ☐ Credit Officer
- ☐ Branch Manager
- ☐ Finance Director

Which year was MoneyMart Finance mostly affected by Covid-19?

☐ 2019

☐ 2020

☐ 2021

SECTION B

Respond the following questions

1. Did Covid-19 really affected Money Mart Finance

Yes

No

State your reason for your answer

.....
.....
.....

2. What challenges did you face during Covid-19 at your branch

.....
.....
.....

3. To what extent did these challenges affect your business operations

.....
.....
.....

4. What mitigatory solution you have implemented to overcome the effects of Covid-19

.....
.....
.....

APPENDIX C

1: Sample Size

Class	Total population	Target sample
Managerial	11	7
Non-managerial	18	9
Clients	25	10
Total	54	26

2: Statistics showing the effectiveness of Covid-19 measures within the financial sector

<i>Statement</i>	<i>Ineffective</i>	<i>Effective</i>
Lockdown rules	42.5%	57.5%
Social distancing	12.5%	87.5%
Intercity travel bans	97.5%	2.5%
Quarantining	35%	65%

3: Descriptive statistics

	DISBURSEMENT_SIZE	NET_PROFIT	NUMBER_OF_CLIENTS	RESID	ROA	ROE
Mean	548407.7	109681.5	585.5000	NA	0.491927	0.505084
Median	659222.5	131844.5	525.0000	NA	0.584512	0.463157
Maximum	746725.0	149345.0	1114.000	NA	0.981575	0.998411
Minimum	145000.0	29000.00	211.0000	NA	0.055918	0.007091
Std. Dev.	214506.6	42901.31	259.3821	NA	0.291271	0.293138
Skewness	-0.915779	-0.915779	0.302612	NA	0.035475	0.044533

Kurtosis	2.176979	2.176979	1.945874	NA	1.732034	1.898829
Jarque-Bera	5.375953	5.375953	1.969971	NA	2.150362	1.627348
Probability	0.068018	0.068018	0.373445	NA	0.341236	0.443227
Sum	17549045	3509809.	18736.00	NA	15.74167	16.16268
Sum Sq. Dev.	1.43E+12	5.71E+10	2085652.	NA	2.629998	2.663830
Observations	32	32	32	0	32	32

4: Heteroskedasticity

F-statistic	3.651576	Prob. F(4,27)	0.0167
Obs*R-squared	11.23392	Prob. Chi-Square(4)	0.0241
Scaled explained SS	29.74941	Prob. Chi-Square(4)	0.0000

5: Multicollinearity

	DISBURSEMENT_SIZE	NET_PROFIT	NUMBER_OF_CLIENTS	ROA	ROE
DISBURSEMENT_SIZE	1	1	0.371936	0.070519	0.139326
NET_PROFIT	1	1	0.371936	0.070519	0.139326
NUMBER_OF_CLIENTS	0.371936	0.371936	1	-0.135915	0.074034
ROA	0.070519	0.070519	-0.135915	1	0.358811
ROE	0.139326	0.139326	0.074034	0.358811	1

6: Regression results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	28686.76	15902.59	1.803905	0.0824
DISBURSEMENT_SIZE	0.161880	0.022374	7.235195	0.0000
NUMBER_OF_CLIENTS	-7.110065	20.76916	-0.342338	0.7347
ROA	22608.00	16977.29	1.331661	0.1941

ROE	-19181.60	16493.14	-1.163005	0.2550
R-squared	0.707543	Mean dependent var		111442.3
Adjusted R-squared	0.664216	S.D. dependent var		43958.16
S.E. of regression	25472.36	Akaike info criterion		23.27118

