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**THE NEXUS BETWEEN MICROFINANCE AND ECONOMIC EMPOWERMENT OF  
MICRO-BUSINESSES IN ASANTE-AKIM CENTRAL MUNICIPALITY OF GHANA**

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## **LIST OF ACRONYMS**

AACMA	Asante-Akim Central Municipal Area
ADB	African Development Bank
AfCFTA	African Continental Free Trade Area
AGI	Association of Ghana Industries
ASCAs	Accumulating Savings and Credit Associations
BBC	British Broadcasting Corporation
BoG	Bank of Ghana
CIDA	Canadian International Development Agency
CIRHD	Cottage Industries and Rural Housing Department
CBRDP	Community-Based Rural Development Programme
CPSEDP	Coordinated Programme of Social and Economic Development Policies
CUs	Credit Unions
DACF	District Assembly Common Fund
DANIDA	Danish International Development Agency
DOCs	Department of Cooperatives
DPs	Development Partners
ENOWID	Enhancing Opportunities for Women in Development
ESRP	Emergency Social Relief Project
EXIM	Export-Import Bank
FINSSP	Financial Sector Strategic Plan
FSIP	Financial Sector Improvement Project
GCCUA	Ghana Cooperative Credit Union Association
GCSCA	Ghana Cooperative Susu Collectors Association
GDP	Gross Domestic Product
GEA	Ghana Enterprises Agency
GEDC	Ghana Enterprise Development Commission
GIPC	Ghana Investment Promotion Centre
GIZ	German Agency for International Cooperation

GoG	Government of Ghana
GRATIS	Ghana Regional Appropriate Technology Industrial Services
GSS	Ghana Statistical Service
IFAD	International Fund for Agricultural Development
IGAs	Income-Generating Activities
ITTUs	Intermediate Technology Transfer Units
JICA	Japan International Cooperation Agency
MASLOC	Micro and Small Loan Centre
MELR	Ministry of Employment and Labour Relations
MFI	Micro Finance Institutions
MIST	Ministry of Enterprises, Science, and Technology
MLGDRD	Ministry of Local Government, Decentralisation, and Rural Development
MMDAs	Metropolitan, Municipal and District Assemblies
MSE	Micro and Small Enterprises
MSMEs	Medium, Small and Medium Enterprises
MoF	Ministry of Finance
MoTI	Ministry of Trade and Industry
NBFIs	Non-Bank Financial Institutions
NBSSI	National Board of Small-Scale Industries
NDPC	National Development Planning Commission
NGOs	Non-governmental Organisations
PAMF-CI	Première Agency de Microfinance-Côte d'Ivoire
PAMSCAD	Programme of Action to Mitigate the Social Costs of Adjustment
PHC	Population and Housing Census
PKSF	Palli Karma-Sahayak Foundation
PSDS	Private Sector Development Strategy
RCBs	Rural and Community Banks
RCT	Randomised Control Trial

RGD	Registrar General Department
RFSP	Rural Financial Services Project
RMFIs	Rural and Micro Finance Institutions
ROSCAs	Rotating Savings and Credit Associations
RTTCs	Regional Technology Transfer Centres
S&Ls	Savings and Loans
SDGs	Sustainable Development Goals
SEM	Structural Equation Modelling
SIF	Social Investment Fund
SSNIT	Social Security and National Insurance Trust
ToC	Theory of Change
UNDCF	United Nations Capital Development Fund
UNDP	United Nations Development Programme
USAID	United States Agency for International Development
VIF	Variance Inflation Factor
VSLA	Village Savings and Loan Associations



## DECLARATION OF ORIGINALITY

Il candidato dichiara che il presente lavoro è originale e non è già stato sottoposto, in tutto o in parte, per il conseguimento di un titolo accademico in altre Università italiane o straniere.

Il candidato dichiara altresì che tutti i materiali utilizzati durante la preparazione dell'elaborato sono stati indicati nel testo e nella sezione "Riferimenti bibliografici" e che le eventuali citazioni testuali sono individuabili attraverso l'esplicito richiamo alla pubblicazione originale.

The candidate declares that the present work is original and has not already been submitted, totally or in part, for the purposes of attaining an academic degree in other Italian or foreign universities.

The candidate also declares that all the materials used during the preparation of the thesis have been explicitly indicated in the text and in the section "Bibliographical references" and that any textual citations can be identified through an explicit reference to the original publication.

Student's signature

A handwritten signature in black ink, appearing to be 'J. J. J.', written over a horizontal line.

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## **ABSTRACT**

This study employs a comprehensive analytical approach to unravel the intricate dynamics between microfinance interventions and business growth. Utilizing various methodologies, including descriptive statistics, cross-tabulations, chi-square, correlation analysis, multiple regression, and Wilcoxon Signed-Rank Tests, this study delves into the multifaceted impact of microfinance on various dimensions of business performance.

The initial exploration of descriptive statistics and cross-tabulations illuminates the distinct profiles of businesses engaging with microfinance support services. Moving forward, chi-square and correlation analyses unveil meaningful associations linking gender, business size, loan size, and business performance. The intricate interplay among microfinance, perceptions of growth, and concrete performance indicators is meticulously examined through multiple regression analysis.

Notably, the Wilcoxon Signed-Rank Tests shed light on the tangible improvements in critical performance areas, including revenue, profit, business expenditure, employees, customers, and product diversification. The outcomes portray the transformative potential of microfinance interventions, extending beyond mere financial gains to impact growth perceptions and performance metrics. These results underscore the pivotal role of loan size, business performance, and contextual nuances in shaping the overall influence of microfinance on businesses.

Moreover, the significance of gender, business size, and sectoral distribution in mediating the outcomes accentuates the necessity for tailored microfinance initiatives and gender-inclusive policies. This research recommends a multifaceted approach, including targeted entrepreneurial training, robust monitoring and evaluation mechanisms, promoting diversification initiatives, and a steadfast commitment to fostering long-term growth.

This study offers insights for policymakers, practitioners, and entrepreneurs by unravelling the intricate relationship between microfinance and business growth. It serves as a guide for harnessing microfinance's potential to drive sustainable economic development, facilitating informed decision-making and strategic planning for stakeholders in microfinance and business development.

## CHAPTER ONE

### INTRODUCTION

#### 1.1 Background to the study

Globally, microfinance serves as a powerful tool for promoting financial inclusion and alleviating poverty (World Bank, 2015). By providing small loans, savings opportunities, and other financial services to individuals and small businesses who lack access to traditional banking systems, microfinance empowers people to invest in income-generating activities and improve their economic well-being (Yunus, 2005; Arouri et al., 2014). This inclusive approach not only fosters entrepreneurship and job creation but also helps individuals and communities build resilience against financial shocks (Ranabahu & Tanima, 2022). Microfinance institutions, often with a social mission, play a vital role in fostering economic development and improving the quality of life for those at the bottom of the socioeconomic pyramid (Corrado & Corrado, 2017).

In Ghana, microfinance has emerged as a prominent and effective development strategy for potentially impacting the lives of the poor (Ministry of Finance, 2006). Micro, Small, and Medium Enterprises (MSMEs) play an integral role in Ghana's economy, contributing significantly to employment generation, income generation, and economic growth (Amoah & Amoah, 2018). These enterprises encompass many businesses, from small retail shops and agribusinesses to artisanal manufacturing. In Ghana, MSMEs face various challenges, including limited access to formal financial services, where microfinance institutions come into play (Ocloo et al., 2021). These institutions provide MSMEs with much-needed financial support through microloans, credit, and savings services (Appiah & Owusu, 2022). They help MSMEs access capital for business expansion, working capital, and investments, promoting entrepreneurship, job creation, and economic development in the country. The symbiotic relationship between MSMEs and microfinance institutions contributes to Ghana's economic vitality and inclusive growth (Addae-Korankye, 2012).

Many developing countries have used microfinance programmes to provide collateral-free loans to low-income people (Singh & Chudasama, 2004). Several impact studies have demonstrated at the international level that microfinance programmes contribute to the attainment of various Sustainable Development Goals (SDGs), including empowering women (Lamichhane, 2020), poverty reduction (Sulemana et al., 2019), and the encouragement of small-scale enterprises (Addae-Korankye, 2012). In addition, many developing countries have formally implemented microfinance as an intervention to support Medium, Small, and Medium Enterprises (MSMEs) (Addae-Korankye, 2012) based on the success stories of countries such as Nepal (Thapa &

Chowdhary, 2022). This strategic adoption of microfinance, inspired by success stories from countries like Nepal, underscores its global significance as a catalyst for fostering inclusive economic growth and supporting MSMEs in the developing world.

Even though microfinance has been around in Ghana in some form for a long time, it was only in the 1990s that the strategy was used formally and on purpose for poverty alleviation (Addae-Korankye, 2020). The Ghana Statistical Service (GSS, 2021) estimates that about 77.1 percent of Ghana's working population is employed by MSMEs in the informal sector. Again, MSMEs account for 90 percent of Ghana's economic activity, implying that MSMEs contribute significantly to Ghana's economic progress (Kessey, 2014). Nonetheless, searching for investible capital by entrepreneurs of MSMEs in Ghana takes time and effort, affecting the growth of businesses in the informal sector. Furthermore, even though MSMEs contribute to economic growth, they have limited access to commercial bank products due to their inability to satisfy administration requirements. Therefore, MSME entrepreneurs seek investment credit from informal and formal microcredit sources (Kessey, 2014). In addition, the emergence of Micro Finance Institutions (MFIs), public funds for MSMEs, and donor support programmes have facilitated microcredit support for MSMEs (Kessey, 2014).

Thus, microfinance is seen as a financially sustainable instrument capable of providing capital for and ensuring growth and sustainability in the private informal sector, ignored by traditional commercial banks (Boateng et al., 2014). The objective of almost every Savings and Loans (S&Ls) company is to provide some form of financial service for people who are typically far from accessing financial assistance from regular banks and to help people experiencing poverty improve their economic situation. Thus, S&L programmes that these companies develop are mainly aimed at laser-focusing on the expansion of economic activities at the local front and enhancing their clients' standard of living through the provision of varying forms of financial services that they need to set up their micro-enterprises (Appiah & Owusu, 2022). Sustainable access to microfinance helps alleviate poverty by generating income, creating jobs, allowing children to go to school, enabling families to obtain health care, and empowering people to make the choices that best serve their needs (Annan, 2003). Although microfinance is not a panacea for poverty reduction and its related development challenges when suitably harnessed, it can make sustainable contributions through financial investment leading to the empowerment of people, and promoting confidence and self-esteem, particularly for women (Bent, 2019).

Against this backdrop, many studies have sought to analyse the nexus between microcredit, a product of microfinance and the promotion of MSMEs with varying outcomes across differing

geographies. While microcredit significantly promoted MSMEs growth in some parts of the world, the converse is recorded in many other regions. Therefore, given the vast presence of microfinance activities in Ghana, it calls for assessing how their activities promote micro-businesses in the country. This establishes the rationale for investigating the nexus between microcredit and the economic empowerment of MSMEs in Ghana.

## **1.2 Statement of the problem**

According to the 2021 Population and Housing Census (PHC), 77.1 percent of the working population in Ghana is found in the private informal sector (GSS, 2022). This group is characterised by a lack of access to credit, which constrains the development and growth of that economic sector (Turkson et al., 2022). For most micro and small entrepreneurs in Africa and other developing countries, the lack of access to financial services is a critical constraint to expanding viable micro enterprises (Dasewicz et al., 2020). Therefore, MFIs are seen as the primary source of finance for microenterprises (Odoom et al., 2019). The role of MFIs in providing credit to individuals who do not have collateral is well-documented (Yunus, 2003), and their emergence in Ghana has filled a vital gap left by traditional commercial banks. In Ghana, microfinance institutions came up to fill a gap created by the refusal of traditional commercial banks to give credit to microenterprises. While conventional commercial banks provide credit based on collaterals, MFIs offer credit to people experiencing poverty who do not provide collaterals (Domeher et al., 2017).

Since the early 1990s, there have been various microfinance interventions both by the government and development partners like United Nations Development Programme (UNDP) and the United States Agency for International Development (USAID) to promote MSMEs development as part of efforts to reduce poverty in Ghana (Addae-Korankye, 2012). Consequently, every region in Ghana appears to have some coverage of microfinance activities in the rural and urban areas (Addae-Korankye, 2012). However, despite the perceived positive impacts of microfinance institutions through microcredit to promoting global MSMEs, there is still scepticism about microfinance institutions' business development, especially in Ghana (Kessey, 2004).

Some schools of thought remain sceptical about the role of microcredit in development. For example, while acknowledging the role microcredit can play in helping to promote business growth, Hulme & Mosley (1996) concluded from their research on microcredit that "...most contemporary schemes are less effective than they might be" (1996, p.134). The authors argued that micro-credit is not a panacea for promoting the growth of businesses and that, in some

cases, businesses have been made worse-off. Blay et al. (2004) also concluded that microfinance institution schemes are less effective than expected. This notwithstanding, microfinance has emerged globally as a leading and effective strategy for poverty reduction with the potential for a far-reaching impact in transforming the lives of poor people. Besides, it is widely acknowledged that microfinance institutions play a significant role in helping business promotion (Appiah & Owusu, 2022).

Therefore, whether microfinance institutions have been able to promote MSMEs among the beneficiaries is the main objective of this study. This is predicated on critical questions Thapa (2019) posed: “Does microfinance sustainably reduce poverty, or is it just a tool to address seasonal poverty?” Inferably by the researcher, does microfinance promote MSME development, or is it just a tool to keep the business cycle afloat? This requires the comparison of two potential outcomes, such as income, business profits, or physical and human capital investment, of the same individual, that is, one with the treatment and the other without it (Thapa, 2019). In this regard, the researcher’s concern is to assess the extent to which microfinance has impacted MSMEs promotion and development in Ghana in general and in the Asante-Akim Municipality in particular by comparing the wellbeing of MSMEs before and after obtaining microcredit against standardised business promotion and development parameters and indices to conclude.

Michael Bateman's analysis, 'Small loans, big problems: the rise and fall of microcredit as development policy' (2018), underscores the significance of critically examining the effectiveness and impact of microcredit in development efforts. This research aims to build upon Bateman's insights by assessing the evolution and challenges of microfinance in the context of promoting MSMEs in Ghana, particularly within the Asante-Akim Municipality. The study seeks to determine whether microfinance institutions have effectively addressed the issues identified by Bateman and contributed to MSMEs' growth and development, thus advancing our understanding of microcredit's role in development policies.

### **1.3 Research objectives**

The overriding objective guiding the study is to investigate the effectiveness of microfinance as a tool for business promotion and development in Ghana. The specific objectives are:

1. To analyze the association between demographic characteristics of MSME owners and business growth attributed to microfinance
2. To investigate the relationship between business characteristics and business growth of MSMEs

3. To assess the impact of microfinance on business growth measured by sales revenue, profitability, expenditure, customers, employees, and product diversification.
4. To establish the relationship of experiences, education, risk, loan amount received, interest payment, and loan grace period for interest payments on business growth of MSMEs.
5. To analyze the opinions of MFI officers regarding the uses of loans by their clients and challenges they face in operating microfinance programs.

#### **1.4 Research Questions**

The main research question is: what is the effectiveness of microfinance as a tool for business promotion and development in Ghana? The specific questions are:

1. What is the association between demographic characteristics of MSME owners and business growth attributed to microfinance?
2. What is the relationship between business characteristics and business growth of MSMEs?
3. What is the impact of microfinance on business growth of MSMEs, as measured by sales revenue, profitability, expenditure, customers, employees, and product diversification?
4. What is the relationship between experiences, education, risk, loan amount received, interest payment, loan grace period for interest payments, and the business growth of MSMEs?
5. What are the opinions of MFI officers regarding the uses of loans by their clients and the challenges they face in operating microfinance programs?

#### **1.5 Hypothesis**

The following hypotheses have been developed and tested in this study:

##### **1.5.1 Chi-Square Test and Correlation Analysis**

**H1:** There is significant association purpose for borrowing and business expansion.

**H2:** There is significant association between access to finance and business expansion.

**H3:** There is significant association between the perceived impact of microfinance and business expansion.

##### **1.5.2 Regressions Analysis**

**H4:** Experience has a significant impact on business growth and expansion of MSMEs.



**H5:** Education has a significant impact on business growth and expansion of MSMEs.

**H6:** Loan interest payment has a significant impact on business growth and expansion of MSMEs.

### **1.5.3 Wilcoxon Signed-Rank Test**

**H7:** Sales revenue of MSMEs increases significantly after involving in microfinance programs.

**H8:** Profitability of MSMEs increases significantly after involving in microfinance programs.

**H9:** Customers of MSMEs increases significantly after involving in microfinance programs.

**H10:** Business expenditure of MSMEs increases significantly after involving in microfinance programs.

**H11:** Employees of MSMEs increases significantly after involving in microfinance programs.

**H12:** Product diversification of MSMEs increases significantly after involving in microfinance programs.

### **1.6 Significance of the study**

Micro-Finance Institutions (MFIs) are essential in making services available to the financially excluded masses, especially those in need and the informal sector. Governments and donor agencies consider microfinance a critical strategy for promoting the development of small businesses in growing economies. Empirical studies have shown that microfinance promotes the growth of MSMEs against risks and is thus associated with improvements in household economic welfare. However, studies have shown that credit offered by MFIs to MSMEs has contributed little to the anticipated results. It is, therefore, against these backgrounds that this study seeks to find more empirically about the distinct role of MFIs in MSMEs promotion and development.

This will help examine the extent to which MFIs in Ghana have emerged as leading and effective strategic agents for promoting MSMEs development and potentially transforming people's lives. MFIs may use the study's findings to enhance access to their financial services and promote the growth of MFIs to increase sustainable economic growth for both owners and the local communities they serve. Positive social change may be promoted through financial empowerment and job creation. In addition, the results of this study may be used to offer a suitable structure for trailing the activities of growth of partners and other fund providers in the sector.

This research is expected to contribute academic knowledge by expanding financial support to MFIs through guarantee and debt instruments applying softer conditions for providers targeting vulnerable clients. These incentives include longer microloan terms and below-market interest rates. It will also seek to improve the quality of support services offered by strengthening linkages between microfinance institutions and partner organisations that deliver “soft” supports for inclusive entrepreneurship.

### **1.7 Research scope**

The research was carried out within the jurisdiction of the Asante-Akim Central Municipal Area (AACMA). The AACMA is among the growing districts of the forty-three (43) Metropolitan, Municipal and District Assemblies (MMDAs) in the Ashanti region of Ghana. It is the main location for many businesses within the Asante Akim enclave, comprising the Asante-Akim North and South Districts. The municipality is considered the Central Business District (CBD) of the entire Asante Akim enclave, thereby representing a significant potential for commercial focus. The presence of MFIs creates opportunities for the growth of MSMEs in the AACMA.

The AACMA has a network of over 15 MFIs that provide microfinance services to MSMEs in the region. Some MFIs offer microcredit services, whereas others offer a comprehensive suite of microfinance services encompassing savings, loans, insurance, and money transfer. Some microfinance institutions have extended their services to include skill development and bookkeeping training for their clients. The AACMA was chosen in this study because, despite the many activities MFIs, no study has been conducted on the nexus between services rendered and the growth of MSMEs in the area. Consequently, there is limited knowledge regarding research endeavours that have attempted to evaluate the impact of microfinance in the AACMA, despite their widespread presence.

Contextually, the scope of the study is microloan applicants of MSMEs who had successfully gained access to microcredit in five (5) consecutive years. Banking products and services are designed and tailored for different consumers. However, there is an attempt to understand the components that would enhance access to the financial needs perceived as appropriate banking services to business owners. The study focused on the effectiveness of microfinance as a tool for business promotion and development in Ghana, particularly in the AACMA. For instance, it sought to examine how microfinance impacts MSMEs' growth. The study further establishes the extent of the economic viability of MSMEs before and after obtaining microfinance support services measured against standardised business growth and development parameters and

indices. It further covered business owners' challenges in fulfilling their microfinance debt servicing obligations to MFIs.

Many classifications of MSMEs have been provided in the literature. However, for purposes of this study, the nationally embraced classifications of MSMEs, specified in the MSMEs Classification Regulations, 2021, have been adopted. The classifications are as follows:

- Micro enterprises comprise an enterprise with permanent employees of 1-5 persons and a turnover of less or equal to one hundred and 50 thousand Ghana Cedis.
- Small enterprises comprise 6-30 permanent employees and a turnover or assets of a fixed amount of one hundred and fifty thousand and six Ghana cedis up to 6 million Ghana Cedis.
- Medium enterprises comprise permanent employees of 31-100 persons with a turnover or assets of a fixed amount of six million and six Ghana cedis up to 18 million Ghana Cedis. Therefore, this nationally determined classification is adopted for this study.

Given the nature of the business climate of the study area, more attention is given to the number of employees rather than business turnover and fixed assets.

### **1.8 Limitations of the study**

While this research contributes valuable insights into the complex interplay between microfinance interventions and business growth, several limitations warrant consideration:

1. **Sample Size and Generalizability:** While carefully selected, the study's sample size might limit the generalizability of findings to broader populations. The research focused on a specific geographic region and a certain set of industries, potentially reducing the applicability of results to other contexts.
2. **Data Collection:** The study relies on self-reported data, which could be subject to response bias and inaccuracies. Participants' perceptions and recollections might influence the data, affecting the overall robustness of the findings.
3. **Causality and Longitudinal Analysis:** The research design does not allow for establishing causal relationships definitively. While the multiple regression analysis indicates associations, it does not confirm causal links. Longitudinal data would provide a more comprehensive understanding of how microfinance impacts businesses over time.

4. **External Factors:** The study does not extensively account for external factors that could influence business growth, such as macroeconomic trends, policy changes, or industry shifts. These factors might confound the observed effects of microfinance.
5. **Perception Bias:** The reliance on perceptions of growth as a key variable might introduce biases based on participants' subjective interpretations. Perceptions can be influenced by various psychological and contextual factors, potentially affecting the accuracy of reported data.
6. **Non-Monetary Impact:** While the research examines various performance indicators, it primarily focuses on monetary outcomes. Non-monetary impacts of microfinance, such as social and environmental effects, are not extensively explored.
7. **Time Constraints:** The study's time frame might limit the ability to capture longer-term effects of microfinance interventions. Business growth trajectories might unfold beyond the scope of the research period.
8. **Selection Bias:** Although efforts were made to select a diverse range of businesses, the process might have unintentionally introduced selection bias due to certain businesses' willingness or ability to participate.

Acknowledging these limitations, this study provides a foundational understanding of the connections between microfinance and business growth, paving the way for future research endeavors to build upon and address these constraints.

### **1.9 Organization of the Study**

The research work is presented in five chapters. Chapter One provides a general introduction to the research. Chapter Two examined existing literature related to the study. This included the theoretical and conceptual framework that drove the study. Chapter Three describes the methodology used in gathering data from the field for analysis. These included the research paradigm, design, data sources, sampling techniques, data collection tools, and analysis methods. Chapter Four sought to analyse the field data, and Chapter Five summarised the study's key findings, conclusion, and recommendations.

## CHAPTER TWO

### LITERATURE REVIEW

#### 2.1. Introduction

This chapter reviews the existing literature that relates to the topic under study. The issues examined include concepts and empirical studies relating to the study's objectives. In addition, the theoretical approaches and the evolution of theories on microfinance are discussed, leading to the construction of the microfinance Theory of Change. Finally, a conceptual framework broadly elucidates the rationale and promotion of microcredit and MSMEs, and the cycle of debt is presented.

#### 2.2. Definitions and Concepts

##### 2.2.1. Microfinance

Microfinance is sometimes used synonymously with microcredit (Qudrat-I Elahi et al., 2006). However, these concepts are distinct (Taiwo & Benson, 2016). Microfinance encompasses a variety of services, including microcredit (Ramezanali & Assadi, 2018). According to Beck (2015), microfinance is the umbrella term for all microfinancial interventions, including microcredit, microsavings, microinsurance, and microfranchising (Raihan et al., 2017).

Azevedo (2007) explains that microfinance provides financial services to low-income clients, who are typically self-employed and engaged in Income-Generating Activities (IGAs) or microenterprises. On the other hand, Kumar et al. (2015) define microfinance as a comprehensive range of financial services such as loans, insurance, and savings provided to low-income groups. In addition, Taiwo & Benson (2016) define it as the provision of financial services tailored to the needs of low-income individuals such as micro-entrepreneurs, including the delivery of small loans, the provision of small loans, the receipt of small savings deposits, and the provision of accessible payment services required by micro-entrepreneurs and other poor individuals. (Addae-Koranky, 2012). Ojo (2007) and Terano et al. (2015) also profess that microfinance is a small-scale financial service provided to informal small business owners so that they can engage in other creative or distributive activities.

According to Stanley (2008), microfinance refers to credit services made available to people operating selected businesses and running small enterprises in rural and urban areas where products are manufactured, reprocessed, repaired, or exchanged. It may include government activities, such as government subsidies, tax exemptions, and larger and small loans to uplift impoverished citizens (Ahmed, 2009; Shrestha, 2016). These microfinancial services are provided

to clients excluded from the conventional financial system due to their low socioeconomic standing (Helms, 2006). According to Ali & Alam (2010), microfinance is the most important resource for providing savings and other essential financial services to boost employment, productivity, and earning capacity. Microfinance also empowers individuals (Durrani et al., 2011) by eradicating poverty and enhancing living conditions, such as health, education, sustenance, and other social impacts. (Ali & Alam, 2010).

Conversely, microcredit is a small, low-interest loan provided to individuals living below the poverty line to enable them to become self-employed (Muralidhar, 2016). People living below the poverty line who lack collateral, access to essential banking services, and are ineligible for traditional loans are offered this scheme (Surbhi, 2017). Thus, microcredit is a small loan given to low-income individuals to encourage them to become self-employed (Bansal & Bansal, 2012). Qudrat-I Elahi et al. (2006) further explain that microcredit is a subcategory of microfinance that refers to the collective services provided to assist individuals from disadvantaged economic circumstances. Therefore, according to Ali & Alam (2010), microcredit aims to effect systemic change in global financial systems by providing financial services to targeted impoverished individuals and small and medium-sized businesses (Ali & Alam, 2010). However, Surbhi (2017) insists that the most beneficial aspect of microcredit is the short-term loans granted without collateral.

The distinction between microcredit and microfinance is that microcredit refers to small loans made by legally registered institutions to unemployed borrowers with minimal or no collateral. Microfinance typically refers to microcredit, savings, insurance, and money transfers geared towards impoverished and low-income individuals (Singh & Yadav, 2012). In contrast, microcredit refers to minor loans to microbusinesses. Therefore, microcredit is a subset of microfinance because it provides credit to those in distress.

Nevertheless, Ali and Alam (2010) assert that these two concepts are acknowledged as effective strategies for eradicating poverty by providing financial services to those who lack access to or are neglected by conventional financial institutions. They emphasise that the impoverished are intelligent in eradicating their poverty, have excellent ideas, and are extremely diligent workers. However, their lack of resources is problematic (Hulme et al., 2001). Microcredit contributes to providing these resources through small loans and assists individuals in increasing their income. According to Qureshi et al. (2012), it is acknowledged that people living in poverty are innately capable of working their way out of poverty with dignity and can demonstrate the creative potential to improve their situation given the appropriate environment and opportunity. Because

of that, many countries provide microcredit programmes to poor individuals to facilitate access to small capital (Ahmed, 2003).

Beyond these perceived empowerment roles accorded to individuals with low socioeconomic status, the development of MSMEs is a growing concern. According to Bateman & Chang (2012), the microfinance model contains the roots of its demise as a development strategy. Contemporarily, microfinance is about creating large profits for microfinance providers, not alleviating the plight of microfinance recipients (Ledgerwood, 1998). As a result, MFIs are incentivised to sell as many microfinance products as possible. Moreover, unlike in other product markets, it is easy to persuade people experiencing poverty that there is no limit to how much microcredit they can consume. Therefore, microfinance providers and recipients are automatically stimulated into excessive supply and demand, fueling the inevitable "microfinance bubble" (Bateman & Chang, 2012).

### **2.2.2. Promotion of MSMEs**

The promotion of MSMEs is globally regarded as necessary due to their multifaceted contributions to societies and national economies. Akingunola (2011) asserts that MSMEs constitute a substantial portion of a country's economic activity. They account for most business establishments and employees and are a significant economic player. As a result, governments have made numerous efforts to promote the activities of MSMEs due to their acknowledged significance and functions. However, despite the absence of a universal definition of MSME, there are two conceptually distinct approaches to promotion (Agyapong, 2010).

The first approach focuses on the function of MSMEs in stabilising society and generating income. Accordingly, specialised assistance is provided to protect socially disadvantaged MSMEs concerning large organisations (Waldan et al., 2021). The second approach acknowledges the importance of MSMEs to economic development by bolstering the industrial structure and encouraging the growth of MSMEs with growth potential (Syal, 2015). Depending on which of these approaches is adopted, the size and nature of the targeted MSMEs will vary concerning assistance. For instance, when MSME promotion is intended to increase industrial competitiveness, the manufacturing sector, which plays a significant role in enhancing the overall efficacy of the industry, is targeted (Upadhye et al., 2010).

Alternatively, promoting MSMEs to revitalise communities, generate income, and create jobs contributes to social stability by reducing the income gap (Shinokazi, 2012). As a result, various businesses, such as community-based small and micro enterprises in the manufacturing and

commercial sectors, are assisted. Therefore, developing the informal sector is essential when rural areas are to be developed by supporting MSMEs (Koloma, 2021).

In light of these considerations, Ackah & Vuvor (2011) argue that securing long-term funding is the most significant obstacle to promoting MSMEs. In many developing nations, it is difficult to acquire funds and capital due to the insufficiency of intermediary financial functions of private banks and underdeveloped capital markets. As a result, MSMEs are considerably disadvantaged, as it is difficult to evaluate the risk of fund lending, and the amount available for borrowing is limited (Megersa, 2020). Moreover, local economies in virtually all developing nations have been saturated with basic informal micro-businesses for many years. Without formal employment or income, informal microentrepreneurship has long been the default activity (Bateman & Chang, 2012).

Consequently, microfinance interventions through the provision of microcredit aim to address these shortcomings. According to Verrest (2013), various forms of microfinance have existed for decades. However, it has only recently attracted global attention as a commercially viable activity that can provide microentrepreneurs with genuine opportunities. Ratnawati (2020) stated that insufficient access to credit by individuals with low incomes might have adverse effects on MSMEs as well as on the general welfare. Therefore, according to Ssendi and Anderson (2009), the primary objective of microcredit is to improve the well-being of the underprivileged by increasing their access to small loans. This also entails providing financial services to promote small enterprises that conventional financial institutions do not typically offer (Taiwo & Benson, 2016).

### **2.2.3. Global Classification of MSMEs**

There is no singular, universally accepted definition of MSME (Bagodi et al., 2022) since firms vary in their levels of capitalisation (Blundell et al., 1999), sales (Bonfiglioli et al., 2020), and employment (De Simone et al., 2023). Consequently, definitions employing measures of scale (number of employees, revenue, profitability, and net worth), when applied to one sector, could classify all businesses as small. In contrast, applying the precise size definition to a different industry could yield a different outcome. Consequently, classification and definition vary across jurisdictions predominantly based on each country's prescription of what qualifies or constitutes a small, medium, or large business. The primary emphasis of the various classifications and definitions is on differences in investment, employment, revenue, capitalisation, profitability, and sales, among other factors.



In response to the growing interest in classifying MSMEs, numerous studies have been conducted to identify a typology of these firms' behaviour and development capabilities (Andersen, 2012). These MSME classifications and proposals contain quantitative and qualitative enterprise characteristics with varied foci (López-Ortega et al., 2015). Current quantitative classifications of MSMEs are founded on the objective measurement of business characteristics (Ellis, 2020). This type of classification is frequently used in the public sector and the administration of programmes centred on the fortification of MSMEs (López-Ortega et al., 2015). The most prevalent quantitative criterion for MSME classification is the enterprise's scale, determined by its number of employees and annual sales (Yakob et al., 2020). These proclamations highlight the non-universal, internationally acknowledged definition of MSME. Consequently, classification and definition vary across jurisdictions predominantly based on each country's prescription of what qualifies as or constitutes a small, medium, or large business. The primary emphasis of the various classifications and definitions is on distinctions, including investment, employment, turnover, capitalisation, profitability, and sales (Ratnawati, 2020a).

According to Devi (2019), MSMEs are independent, non-subsidiary businesses with fewer than a specified number of employees. This figure differs between national statistical systems. As in the European Union, the most typical upper limit is 250 employees. However, some countries limit the number of employees to 200. In contrast, the United States considers enterprises with fewer than 500 employees to be MSMEs. In addition, small businesses typically have fewer than 50 employees.

In contrast, microbusinesses have no more than ten and, in some cases, no more than five. Additionally, financial assets are used to define MSMEs. The European Commission (EC, 2005) classifies MSMEs as micro, small, and medium-sized if they have fewer than 250 employees, an annual revenue of no more than 50 million euros, and a balance sheet total of no more than 43 million euros annually. In the United Kingdom (UK), microbusinesses are organisations with 0–9 employees (Ward & Rhodes, 2014).

Various entities define the MSME sector differently based on their utilisation, activities, and policy objectives in Egypt. However, the most frequently employed criteria are the enterprise's number of employees and fixed assets. Thus, enterprises in Egypt are considered micro-enterprises if they employ between one and four workers (1–4), small if they employ between five and fourteen workers (5–14), and medium if they employ between fifteen and forty-nine (15–49) workers (Ministry of Foreign Trade, Egypt, 2003). The Nigerian government defines small enterprises as those with annual revenue of less than N500,000 and capital investment of less

than N2 million. In the United Kingdom, small enterprises have fewer than 500 employees and an annual revenue of less than £100 million. According to the industry classification based on workforce size, annual returns, and total company assets, SMEs are defined in China (Taiwo & Benson, 2016). In Malawi, the official definition of enterprise size is founded on three criteria: the amount of capital investment, the number of employees, and the amount of revenue generated. A business is considered small-scale if it meets two of the following three criteria: it has a capital investment between \$2,000 and \$55,000, employs between 5 and 20 people, and has a turnover of up to \$110,000 (using the official exchange rate of 1992) (Quartey, 2000).

Kushnir (2010) compiled a compendium of how different economies define and categorise SMEs. The report addressed official and working definitions of SMEs used by governments and private financial institutions in 120 economies. The compilation revealed that "in some instances, Industry Canada has employed a definition based on the number of employees, which fluctuates by industry. If a firm produces goods with fewer than 100 employees, it is considered "small," whereas a firm that produces services is considered "small" if it has fewer than 50 employees. A company is considered medium-sized beyond that scale and up to 499 employees. The tiniest businesses are called microenterprises and typically have fewer than five employees. Moreover, "SME" (small and medium-sized enterprises) refers to companies with fewer than 500 employees. In contrast, organisations with 500 or more employees are categorised as "large" (Kushnir, 2010).

In Ghana, the term "micro, small, and medium-sized enterprises" has been defined in numerous ways. However, the most prevalent criterion is the business's employee count. There is frequently ambiguity regarding the arbitrariness and cut-off points utilised by various official sources when this definition is applied. For example, in its Industrial Statistics, the Ghana Statistical Service (GSS) classifies businesses with fewer than ten employees as Small-Scale enterprises and those with more than ten as medium- and large-sized enterprises. In their national accounts, the GSS classified enterprises with up to nine employees as SMEs (Quartey, 2000). In contrast, Osei et al. (1993) defined Small Scale Enterprises in Ghana are characterised by a minimum employment requirement of thirty employees. However, the latter categorises small enterprises into three groups: (i) micro consists of fewer than six employees, (ii) very small consists of six to nine employees, and (iii) small consists of 10 to 29 employees.

Fixed asset value is an alternative criterion for defining small and medium-sized businesses. The Ghana Enterprises Agency (GEA), on the other hand, implements the "fixed asset" and "number of employees" criteria. It defines a Small-Scale Enterprise as one with no more than

nine employees and plant and machinery (excluding land, structures, and vehicles) that total no more than ten million cedis (US\$9506.00 at the exchange rate in 1994). In contrast, the Ghana Enterprise Development Commission (GEDC) defines plants and machinery as having a maximum value of 10 million cedis (Quartey, 2000).

After studying the varied global and country-specific definitions and classifications of MSMEs, Rupeika-Apoga & Petrovska (2022) contend that the differing definitions have their roots, particularly in an aspect of "subjectivity and qualitative judgement" in classifying businesses into micro, small, medium, or large scales. Consequently, qualitative classifications have also been developed to define MSMEs. On the other hand, qualitative classifications endeavour to identify the development capabilities of MSMEs (Etim et al., 2020). These MSME classifications arose from the notion that quantitative characteristics only account for a portion of the enterprise's actuality. In contrast, qualitative characteristics of MSMEs can better explain the development of the enterprise (López-Ortega, 2015).

Several authors have attempted to implement the ideas of Miles et al. (1978) because MSMEs typologies based on qualitative characteristics frequently lack measurable properties that enable the classification of every company (O'Regan & Ghobadian, 2005; Kabanoff & Brown, 2008). In addition, additional endeavours have been made to classify businesses according to their level of knowledge (Wiratmadja et al., 2013). In this instance, the knowledge available to businesses is closely related to their capacity for development (Wiklund & Shepherd, 2003).

#### **2.2.4. Classification of MSMEs in Ghana**

As in many countries, there is no consensus on the definition of MSMEs in Ghana. MSMEs are widely spread in Ghana, and as in most countries, there is no national consensus on the definition of MSMEs. According to Nkuah et al. (2013), Ghana's micro, small, and medium enterprises (MSMEs) are privately owned and operated businesses with few employees and a relatively low sales volume. Typically, small businesses are private corporations, partnerships, or sole proprietorships. There is no commonly acknowledged definition of a small or medium-sized business. Internationally, the definitions of MSMEs tend to encompass significantly more entities than the definitions in Ghana. This is a result of, among other factors, the modest size of the Ghanaian economy. In Ghana, employment is the most significant factor in determining the scale of businesses.

Osei et al. (1993) classified MSMEs into three categories based on the employment threshold of 30 employees. They emphasised that microenterprises are businesses that employ fewer than six people, very small enterprises employ between six and nine people, and small enterprises employ

between ten and twenty-nine people. Similarly, the Ministry of Local Government, Decentralisation, and Rural Development (MLGDRD) in Ghana considers businesses with 1–9 employees to be small-scale, 10–20 employees to be medium-scale, and more than 20 employees to be large-scale. The Ghana Statistical Service (GSS) also classifies businesses with fewer than ten employees as small-scale enterprises and those with more than ten employees as medium- and large-sized businesses. In its national accounts, the GSS classified enterprises with up to nine employees as small and medium-sized businesses (Quartey, 2000).

An alternative criterion for defining MSMEs is a company's fixed asset valuation. In the 1987 Ghana Industrial Census, Ghana Statistical Services defined micro-enterprises as those in the manufacturing and service sectors with fewer than five employees or fixed assets of less than \$10,000, excluding land and buildings. Small businesses employ six to twenty-nine employees or have fixed assets valued at less than one hundred thousand dollars. In contrast, medium-sized businesses have 30 to 99 employees, and large businesses have at least 100.

The National Board of Small-Scale Industries (NBSSI, 1990) also categorises MSMEs based on "fixed assets and employee count" criteria. According to the NBSSI, small-scale enterprises with fewer than nine (9) employees and plant and machinery, including land, structures, and vehicles, are valued at less than ten million Ghana Cedis. In contrast, microenterprises have fewer than five (5) employees. The GEDC places a maximum limit of 10 million Ghanaian cedis on plants and machinery. It is essential to note that valuing fixed assets presents a challenge. Second, the constant depreciation of the local currency relative to major trading currencies renders such definitions frequently obsolete (Quartey, 2000).

The Ghana MSMEs Classification Regulations, 2021, addressed the definitions by consolidating various agencies' and experts' classifications. In this regard, the following national classifications are specified: Microenterprises are enterprises with fewer than or equal to one hundred and fifty thousand Ghana Cedis in annual revenue and one to five permanent employees. Six to thirty (6–30) permanent employees and a turnover or asset base of one hundred fifty thousand and six Ghana cedis to six million Ghana cedis define small enterprises. Medium enterprises should have between thirty-one and one hundred (31–100) permanent employees and a turnover or assets of between six million and eighteen million Ghana cedis. For the objectives of this study, we have adopted this nationally determined classification.

## **2.3. Situational Analysis of Ghana's MSMEs Sector**

### **2.3.1. Characteristics of the MSME Sector in Ghana**

The small-scale business sector in Ghana began to acquire prominence in the early 1960s, when numerous individual enterprises emerged. Before this period, agriculture was the dominant economic sector. Small and medium-sized enterprises in Ghana are more labour-intensive than larger firms and, consequently, have reduced capital costs associated with job creation (Oppong et al., 2014). They are predominantly registered as sole proprietorships, and working proprietorships are the largest employment category (Mendoza et al., 2023). These categories comprise over fifty percent of the MSME labour force (GSS, 2022). Typically, the owner's family is in charge of running the business (Ghamloush, 2021). Although they are typically considered unpaid staff, they are involved in the business and account for approximately a quarter of the workforce. (Augendra et al., 2019) The rest of the workforce comprises both hired labourers and trainees or apprentices.

According to the Ministry of Trade and Industry (MOTI, 2019), their primary business activities are retail trading and manufacturing. While it is commonly believed that most MSMEs will fall into the first category, the proportion of MSME retail activity in rural and urban areas differs considerably. Most retailing occurs in urban and peri-urban areas, while most manufacturing occurs in rural or urban centres. However, the extent of involvement in manufacturing in any given sector is contingent on several variables, including the availability of raw materials, domestic consumers' preferences and consumption patterns, and the degree of development of export markets (MOTI, 2019).

Small and medium-sized enterprises in Ghana are also classified as urban or rural. The former consists of "formal" and "informal" enterprises. The majority of formal enterprises have paid employees, a registered office, and pay Social Security and National Insurance Trust (SSNIT) contributions on behalf of their employees (MOTI, 2019). The rural enterprises consist of family groups, individual artisans, and women engaged in food vending and related enterprises (Abor & Quartey, 2010). The major activities within this sector include soap and detergents, fabrics, clothing and tailoring, textiles and leather, village blacksmiths, tin-smithing, ceramics, timber and mining, beverages, food processing, bakeries, wood furniture, electronic repairs, agro-processing, chemical-based products, and mechanics, among others (Sarbah & Quaye, 2021). Self-employed individuals with low levels of education and training characterise this sector. They are predominantly family-owned businesses, and there is minimal separation between the business

finances and those of the owners to the extent that the owners' or operators' personal accounts are identical to those of the business (Zotorvie, 2017).

In Ghana, most micro, small, and medium-sized enterprises strongly focus on the owner-managers as opposed to a separate corporate structure. As a result, there is often greater subjectivity in decision-making and the prevalence of largely informal employer-employee relationships (MOTI, 2019). Another feature distinguishing MSMEs from larger firms is that the latter has direct access to international and local capital markets. In contrast, the former is excluded because of the higher intermediation costs of smaller projects. In addition, MSMEs face the exact fixed costs as large enterprises in complying with regulations but have limited capacity to market their products abroad (Quartey, 2000).

While definitions and thresholds vary across institutions and countries, MSMEs are universally recognised as the engines of job creation and economic growth, comprising more than half of global employment and private sector output when measured by their contribution to GDP (Gora & Dahiya, 2022). MSMEs play a significant role in Ghana, making up more than 80 percent of total employment (versus 67% globally) and over 70 percent of private sector output (versus 52% globally). Also, it is estimated that about 90 percent of businesses in Ghana are MSMEs, which is consistent with the global average (MOTI, 2019).

About 1.7 million of the estimated 2.1 million businesses in the Ghanaian MSME sector are classified as microenterprises. These businesses employ approximately 2.5 million individuals (30% of all MSME employees), equating to an average of 1-2 jobs per microenterprise. On the other hand, the small enterprise category accounts for 15 percent of all MSMEs, with approximately 320,000 businesses and 23 percent of all MSME employment (1.9 million employees). This results in an approximate average of six jobs per small business. Lastly, approximately 85,000 medium enterprises account for 4 percent of all MSMEs but account for 47 percent of total MSME employment (approximately 3.9 million employees). This equates to an average of approximately 46 jobs per medium-sized business (MOTI, 2019).

### **2.3.2. Promoting MSMEs Development in Ghana**

Promoting micro, small, and medium-sized enterprises (MSMEs) is crucial in many countries, including Ghana, because MSMEs serve multiple functions for a country's society and economy. First, MSMEs contribute significantly to the economic activity of a nation. In many countries, MSMEs account for most businesses and employees. Consequently, they play a significant role in economic activity. In Ghana, high unemployment, underemployment, and a sizable unorganised sector are significant obstacles (Dadzie et al., 2020). According to available data from the

Registrar General Department (RGD), approximately 90 percent of businesses registered in Ghana are MSMEs, with over 70 percent operating in the informal sector (Ghana Statistical Service, 2021). The government has designated these businesses as the vehicles for achieving its industrial transformation agenda and other development objectives. Thus, the Government of Ghana (GOG) intends to move forward with economic policy reform processes to facilitate broad-based development and create jobs (CPSEDP, 2018). In this context, MSMEs are indispensable (MOTI, 2019).

Opong et al. (2014) argue that no other development strategy has so prominently found expression in Ghana's development plans as the MSMEs development strategy. Modern times, mainly since Ghana adopted its economic reform programme in 1983, have seen a clear shift away from grandiose, capital-intensive, large-scale industrial projects based on the import substitution philosophy and toward micro- and small-scale businesses with enormous potential for creating domestic links for rapid, sustainable industrial development (Opong et al., 2014). According to the NDPC (2010), successive governments have attempted to reduce poverty and boost economic growth by increasing foreign direct investment, diversifying the economy, enacting legislative frameworks that support small business ownership, and, at most, launching employment and entrepreneurship programmes.

The MSME sector is a key strategic sector in the overall policy objectives of the Ghanaian government, according to the Ministry of Employment and Labour Relations (MELR, 2014). It acts as a change agent for inclusive economic growth, regional development, job creation, and poverty reduction. The government recognises MSMEs as a significant source of employment. Offering them specialised support can increase their ability to generate employment. Given the nature of this sector and its challenges, it is crucial to have a government-led intervention and support mechanism to enhance and strengthen the MSME sector to meet national expectations (MELR, 2014).

The Ghanaian government acknowledges that raising domestic and global competitiveness is crucial for this industry to meet new challenges and grow MSMEs into a thriving sector. As a result, the government formulated the National MSMEs Policy, which aims to support high-potential, promising MSMEs and enhance the business climate so they can reach their full potential in the modern, globalised economy.

The Banking Act of 2004 (Act 673) currently regulates community and rural banks, while the Non-Bank Financial Institutions (NBFI) Law of 1993 (PNDCL 328) regulates savings and loan institutions. Additionally, Ghana has legal frameworks that support the development of MSMEs.

For example, the Ghana Investment Promotion Centre (GIPC) Act, 2013 (Act 865) encourages and promotes investments in Ghana by establishing an attractive incentive framework and a transparent, predictable, and investment-friendly environment. In addition, the Micro, Small, and Medium Enterprise Development Act of 2006 (Act 27) makes the development and promotion process easier as it raises the micro, small, and medium-sized businesses in Ghana's competitiveness.

In 1981, the Ghanaian government recognised the significance of the MSMEs industry and its contribution to national economic development. As a result, it created the National Board for Small-Scale Industries (NBSSI, 1981) through Parliamentary Act 434, which became operative in 1985. Furthermore, to decongest MSME support programmes in Ghana, the Cottage Industries and Rural Housing Department (CIRHD) and the Ghana Enterprise Development Corporation (GEDC), explicitly dedicated to all Ghanaian-owned enterprises in Ghana, including MSMEs, were absorbed under the NBSSI in the 1990s.

#### **2.4. Challenges of the MSME Sector**

Despite extensive reforms, MSMEs confront a variety of global constraints. Alam & Dunan (2019) explain that discussions regarding promoting MSMEs have focused on two primary concerns. These include establishing an environment conducive to the growth of MSMEs and internal issues within the sector (Supardi, 2021). On the other hand, Amoah & Amoah (2018) highlight the absence of stringent MSME promotion activities in many developing countries despite policy direction. Thus, the duties and responsibilities of the central and local governments, including budgeting, are unclear, making it challenging to guarantee long-term policies.

Moreover, effective planning and implementation of measures for MSME promotion cannot be executed in some instances due to underdeveloped government institutions that support MSMEs and a lack of administrative officer capacity (Patil, 2017). However, Larasati (2022) argues that this claim is invalid because many developing nations have enacted laws and formulated policies to promote MSMEs to provide employment opportunities for the increasing unemployed population and thereby reduce poverty. Fafunwa & Odufuwa (2023) indicate that the convergence point relates to the necessary capacities, robust institutional arrangements, and the will to implement the provisions of these legal frameworks that seek to promote MSMEs.

Regional economic integration is advancing swiftly due to the implementation of the African Continental Free Trade Area (AfCFTA) obligations. These regional conditions should be part of the business environment that affects the growth of small and medium-sized enterprises.



Nonetheless, Attrams & Tshehla (2022) acknowledge numerous obstacles impeding the development of MSMEs in Ghana. Predominant amongst them are: a weak institutional and regulatory framework; a high cost of doing business; weak value chain integration and interaction; a lack of specific policies aimed at women and youth entrepreneurial development; limited access to credit and business development services; a lack of a strong, coherent, and organised MSME voice to represent the sector; an inability to meet production standards; limited export opportunities; and the inability to install and implement management systems standards (Abor & Quartey, 2010; Ackah & Vuvor, 2011; Asare, 2014).

The legal and regulatory framework is centralised, bureaucratic, and expensive (Kusi et al., 2015). This legal and regulatory setting has characteristics that have a negative impact on enterprises of all sizes. Due to the correspondingly high cost of compliance resulting from their size, MSMEs face additional constraints in this environment compared to larger enterprises (MOTI, 2019). Consequently, most of these businesses have failed to formalise, and microenterprises have been unable to expand and transform into small and medium-sized businesses. Similarly, the Ghana Private Sector Development Strategy I and II (PSDS I and II) identified the following as some of the critical constraints inhibiting MSME growth in Ghana: a poor investment climate, a weak or poor entrepreneurial culture, a lack of access to capital or a high cost of capital for MSMEs, weak private sector support institutions, a cumbersome legal and regulatory framework, and poor MSME support infrastructure (MOTI, 2019).

The Association of Ghana Industries (AGI) Afro Barometer Report (Q1 2018) also indicated that the leading causes of small business failure are the high cost of credit, the high cost of electricity; poor awareness of the policy and regulatory environment; constrained (collateral requirements) access to credit, and delayed payments; low knowledge of quality and standards requirements; unfavourable government procurement practises; the complexity of export markets access procedures; and the lack of a skilled labour force.

Moreover, although there has been an increase in the number of institutions and programmes designed to support the MSME sector, these institutions and programmes have been generally feeble, fragmented, uncoordinated, and concentrated primarily in urban areas. Multiple stakeholders, including government ministries, departments, agencies, private sector associations, Non-governmental Organisations (NGOs), and Development Partners (DPs), are involved in developing MSME sector support programmes in Ghana. However, these institutions are predominantly under-resourced in terms of equipment, personnel, and operational funds; as a

result, they cannot fulfil their mandated responsibilities of fostering the sector's desired enabling environment (MOTI, 2019).

In addition to physical infrastructure (such as facilities for water supply and electricity, roads, and ports), sustaining businesses also requires intellectual infrastructure (Spillan & King, 2017). Standardisation, intellectual property rights protection, and statistical systems are examples of intellectual infrastructure (Blakeney & Mengistie, 2011). However, in many developing nations, the intellectual infrastructure linked to industrial activities is underdeveloped (Perroux, 2017). Moreover, obtaining long-term capital remains one of the primary obstacles for MSMEs (Kusi et al., 2015). In many developing nations, it is difficult to acquire funds and capital due to the insufficient financial intermediaries of private banks and underdeveloped capital markets (Megersa, 2020).

Consequently, MSMEs are severely disadvantaged, as the risk of lending funds is difficult to assess, and the amount available for borrowing is limited. Therefore, designing and implementing systems that address these deficiencies is necessary. Microfinance attempts to fill this void by providing micro and small loans for start-ups and small businesses with microcredit and small loans that are quick, simple, and easily accessible to develop and expand their businesses and increase job and wealth creation (MASLOC, 2023).

## **2.5. Microfinance Sector of Ghana**

In recent years, microfinance has become a popular strategy for alleviating poverty in developing and least-developed nations. Rarely will you find a developing nation where a development-focused donor agency is not promoting a microfinance programme. Microfinance programmes are credited with numerous accomplishments. An outside observer cannot help but marvel at the breadth and diversity of the asserted benefits (Ahmed, 2009). According to the Bank of Ghana (BOG, 2007), microfinance can encourage greater investment and economic empowerment, boosting confidence and self-esteem, especially among the most vulnerable. In addition, Ghana's encouraging entry and adjusting regulation have fostered a wide range of Rural and Micro Finance Institutions (RMFIs) and products in the formal, semi-formal, and informal segments, including some suitable for microenterprises and lower-income households, with some reasonably strong linkages between segments (Steel & Andah, 2003; BOG, 2007).

In Ghana, formal financial institutions are those that are incorporated under the Companies Code 1963 (Act 179) and licenced by the BOG under the Banking Law 1989 (PNDCL 225) or the Financial Institutions (Non-Banking) Law 1993. The term "Rural and Micro Finance Institutions" (RMFIs) is used to refer collectively to the full range of these institutions while

recognising that they use different methodologies to reach different albeit overlapping clientele among farmers, rural households, people with low incomes, and microenterprises, and hence that different regulatory and supervisory instruments may be appropriate (BOG, 2007). These institutions include S&Ls and commercial banks. S&Ls are most active in micro and small-scale financial intermediation utilising microfinance techniques such as Village Savings and Loan Associations (VSLA). Moreover, commercial banks primarily target wealthy and middle-income urban households. According to research conducted by United Nations Capital Development Fund (UNDCF, 2004), only 5 percent of households are served by the commercial banking system. In addition, most of the population is excluded due to the costly minimum deposit requirements.

Moreover, with 60 percent of the money supply outside the commercial banking system, the semi-formal and informal financial systems, rural banks, and savings and loan companies play a vital role in Ghana's poverty reduction strategies and private sector development (Amponsah et al., 2006). Rural and Community Banks (RCBs) operate similarly to commercial banks under the Banking Law, with the exception that they cannot engage in foreign exchange operations, their clientele is derived from the local catchment area, and their minimum capital requirement is significantly lower (Steel & Andah, 2003). Savings and Loan Associations (S&Ls) are also recognised as formal providers of microfinance services. The BOG published a list of twenty-five savings and loan associations in Ghana in 2019, revoking the licences of twenty-three insolvent savings and loan associations and finance house associations (Graphic Business, 2019). In the first quarter of 2022, S&Ls disbursed 3.4 billion Ghana cedis in net loans to private businesses and enterprises (Graphic Business, 2019). Even though they are limited in the number of services they can provide, they are essential to the Ghanaian microfinance industry.

Formally registered NGOs and Credit Unions (CUs) are considered part of the semi-formal system. Alhassan (2018) asserts that the Bank of Ghana does not issue them a licence. According to the Companies Code, NGOs are incorporated as non-profit limited liability companies (Ussif & Erturul, 2020). Their focus on poverty leads to a relatively deep penetration of poor clients using microfinance methods, albeit on a relatively small scale (Peprah & Obeng, 2015). However, because they are not authorised to accept deposits from the general public, they must rely on external, typically donor-funded funds to provide microcredit (Addae-Korankye, 2020). The Department of Cooperatives (DOCs) registers credit unions as cooperative thrift societies that can only take deposits from and make loans to their members (BOG, 2007). Even though credit unions are included in the NBFIL Law, BOG has permitted the Ghana Cooperative Credit Union

Association (GCCUA) to continue regulating the societies until a new credit union law is introduced.

The informal financial system encompasses a variety of activities known as "susu", such as individual savings collectors, alternating savings and credit associations, and savings and credit "clubs" managed by an operator (Boachie & Adu-Darko, 2022). It also consists of the traditional "nnoboa" system of mutual assistance through the exchange of labour (Oteng-Abayie et al., 2011), relatives (Peprah & Koomson, 2015), personal loans from friends and neighbours (Bashiru et al., 2014), self-help organisations, moneylenders, and trade creditors (Sekyi, 2017).

By the mid-1960s, moneylending was increasingly part-time for merchants and others with liquid funds. Moneylender loans are typically issued for three to six months (Steel & Andah, 2003). In the early 1990s, the average interest rate on a 3-month loan was between 25 and 30 percent, a decrease from the rate of 100 percent in 1983. Moneylenders require collateral in physical assets such as undeveloped land, buildings and farmland. Typically, loans to employees, including civil servants, are guaranteed by the paymaster (Steel & Andah, 2003).

Addae-Korankye (2020) explains that Ghana's microfinance institutions' most pervasive and noticeable method is the Susu system. With mobilised savings, however, corrupt and exploited systems can no longer engage in corrupt practices (Hossein & Bonsu, 2023). Primarily, the susu system offers savings products to help customers save between one month and two years. Nonetheless, credit is also prevalent (Boachie & Adu-Darko, 2021). However, the central bank has not attempted to regulate them, leaving them to enhance the industry's reputation and quality through self-regulation (Steel & Andah, 2003).

The Ghana Cooperative Susu Collectors Association (GCSCA) closely regulates the business of all susu collectors to protect the collectors', clients, and other stakeholders' interests (Addae-Korankye, 2020). Due to the emergence of rural banks, credit unions, susu associations and clubs, and notably S&Ls, the role of individual moneylenders has lessened (Duah & Kyaruzi, 2009). The number of licenced moneylenders in the Accra Region decreased from 33 in 1972 to 4 in 1988 (Steel & Andah, 2003).

## **2.6. Challenges of the Microfinance Sector of Ghana**

Microfinance is indispensable to the Ghanaian economy. However, it lacks fundamental infrastructure, clearly defined operational areas, capacity enhancement, and funding (Addae-Korankye, 2012). In addition, Addae-Korankye argues that, despite training programmes, the sector lacks the requisite skills and competent personnel to be competitive in the financial

industry. Additionally, Marfo and Peprah (2018) conclude in their study that the microfinance industry in Ghana encounters numerous obstacles. This consists of insufficient funding, a lack of information on microfinance institutions, their operations, and their clients (Steel & Andah, 2003), a lack of uniform methods, procedures, and data and information gathering (Addae-Korankye, 2012), a lack of reliable and sufficient data and information on outreach (Boateng, 2015), and a lack of regulation and supervision from the Central Bank of Ghana (Affum, 2020a).

According to Odoom et al. (2019), microfinance institutions (MFIs) themselves encounter an array of constraints, such as defaults on loans, high operating expenses, a lack of skilled personnel, poor salaries and compensations, insufficient supervision and monitoring of both staff and clients, a lack of frequent followups to clients' shops and business centres, poor record keeping, and a lack of human and institutional capacity building (Steel & Andah, 2003; Bank of Ghana, 2007; Addae-Korankye, 2012; Boateng & Agyei, 2013; Boateng, 2015; Quaye & Hartarska, 2016; Effah, 2017; Marfo & Peprah, 2018; Arhin et al., 2019; Agyeman et al., 2020). These obstacles have a negative effect on the profitability and sustainability of MFIs, as well as their capacity to provide resources for the impoverished and reduce poverty.

Players in the microfinance industry have long argued for dialogue on the creation, application, and review of regulatory and supervisory policies and procedures considering these difficulties to ensure uniformity and practical approaches to regulation across various types of microfinance institutions (Gallardo, 2002; Duho et al., 2021; Ussif, 2021). As a result of non-compliance, the Bank of Ghana (2019) revoked 347 microfinance licences. The BoG claims that by revoking the licences, it will be possible to eliminate insolvent and abandoned institutions that threaten the financial system's stability because they have denied depositors access to their funds and have no realistic chance of recovery (Graphic Online, 2019).

## **2.7. Microfinance Interventions in Ghana**

Every region in Ghana appears to have some coverage of rural and urban microfinance activities (Addae-Korankye, 2012). Government of Ghana programmes; donor-assisted programmes; DPs; MFIs such as rural banks, savings and loans companies, credit unions, and NGOs; district assembly (DA) initiatives; community-based initiatives; and church-based programmes comprise the mix of activities (Awusabo et al., 2009; Kesse, 2014; Amoako-Sakyi, 2017; Addae-Korankye, 2020). Some of the microfinance programmes include the Financial Sector Improvement Project (FSIP), the Financial Sector Strategic Plan (FINSSP), the Rural Financial Services Project (RFSP), the UNDP Microfinance Project, the Social Investment Fund (SIF), and the Community-Based Rural Development Programme (CBRDP) (Asiama & Osei, 2007).

Since 1989, the government has introduced numerous special credit programmes, frequently at reduced rates, reaching incredibly few people and having appalling recovery rates (Sowa, 2022). The NBSSI, Ghana Regional Appropriate Technology Industrial Services (GRATIS), and Enhancing Opportunities for Women in Development (ENOWID) are a few examples of public sector initiatives. Act 434 of 1981 established the NBSSI as the governing body in charge of developing and promoting Ghana's Micro and Small Enterprises (MSE) sector. It began operations in 1985 because the government believes the sector has the potential to significantly reduce poverty levels, reduce high unemployment, and significantly contribute to Ghana's economic growth. NBSSI's objectives include connecting micro and small businesses to microfinance schemes (Addae-Korankye, 2020).

The Ministry of Enterprises, Science, and Technology (MIST) launched the GRATIS project in 1987 to support Ghana's small-scale enterprises. GRATIS was created and run through a network of Intermediate Technology Transfer Units (ITTUs), currently known as Regional Technology Transfer Centres (RTTCs), to achieve this objective. It operates across nine districts of Ghana to teach, produce, and provide machinery, tools, plants, and equipment to small-scale manufacturers and transmit applicable technologies to them. Additionally, it seeks to serve its clientele by offering loan facilities (Asiedu, 2016).

The ENOWID Foundation was created and ushered into action 1991 as a UNDP initiative to offer technical and financial assistance to raise women's production, enhance their managerial abilities, and market their goods. Its primary objective was to provide rural women with empowerment and poverty reduction opportunities via financial and technical support (World Bank, 1999). The programme's microfinance delivery component sought to boost women's income by assisting in mobilising savings and offering loans. Using money from the Programme of Action to Mitigate the Social Costs of Adjustment (PAMSCAD), ENOWID disbursed more than 3,500 relatively modest loans (over six years) with a cumulative recovery rate of 96 percent (Quainoo, 1997).

Steel & Andah (2003) claim that only Enhancing Opportunities for Women in Development (ENOWID), which was part of PAMSCAD, was operationally successful and recorded a recovery rate of over 70 percent among the numerous intervention schemes managed by the National Board for Small Scale Industries (NBSSI). Adjei (2010), on the other hand, stated that as of mid-2009, the Micro and Small Loan Centre (MASLOC) of the Government of Ghana had just a 25 percent payback rate.

The government has also entered the microcredit sector using the District Assembly Common Fund (DACF) and poverty alleviation programmes (Yankson, 2008). In some instances, this has made wholesale funds available to local RMFIs for re-lending. However, more often than not, it has been perceived and used as politically motivated "loans" with negative consequences for repayment (Obeng, 2008). In addition, the government launched the Emergency Social Relief Project (ESRP) in 2001 to provide the economically active impoverished with 57 million dollars in business financing at a 20 percent interest rate from 2002 to 2004. Disbursements were made through RCBs, S&Ls, and NGOs, which evaluate the recipients. The primary threat to sustainable rural and microfinance posed by these government programmes is the negative impact on RMFIs' efforts to mobilise savings and collect from borrowers, whose willingness to repay is typically low when loans are known to be subsidised by the government or a donor. Particularly perilous for RMFIs managing such funds is the possibility that a lack of repayment could spread to their portfolios (GOG, 2007).

Most financial assistance for microfinance programmes has come from donors such as the World Bank, the European Union, the United Nations Development Programme, the African Development Bank (ADB), Canadian International Development Agency (CIDA), German Agency for International Cooperation (GIZ), International Fund for Agricultural Development (IFAD), Japan International Cooperation Agency (JICA), USAID, and Danish International Development Agency (DANIDA) (Addae-Korankye, 2020). The support has been in the areas of providing grants to finance institutional development costs of MFIs with the objective of building capacity within these institutions to enable them to improve outreach to the rural and urban poor, financing the purchase of fixed assets such as equipment, vehicles, and logistical support to enhance the mobility and institutional capacity for improving outreach, monitoring, supervision and general management of microfinance operations and; funding for Revolving Loan Funds (RLF) as a strategy for improving access to the rural and urban poor to loanable investment funds for investing in their micro /small scale and informal sector enterprises (Addae-Korankye, 2020).

The actions taken by donors and the assistance given by the government to the microfinance sector are considerably responsible for the reduction of poverty in Ghana. This is because they make loans available to microenterprises at an interest rate that is typically quite low. This creates jobs, increases income and profits, and often reduces poverty (Antwi, 2015). However, evidence in the records suggests that certain MFIs have suffered due to government and donor interference in the microfinance industry. Several of them even collapsed as a result. This is because the interest rate caps imposed by donors and the government make it difficult for MFIs

to cover their expenses. In addition to this, it heightens competition, which ultimately results in the closure of inefficient MFIs. Some MFIs engage in excessive trading and employ other strategies that ultimately lead to their collapse, sluggish growth, and negative growth as they seek to outperform donors and governments (Antwi, 2015). Other microfinance institutions strive to gain an advantage over donors and governments by reducing their interest rates, increasing their branches, and offering higher returns on customer deposits.

Through the services offered by MFIs, savings and loan companies, non-governmental organisations (NGOs), and some commercial banks, private capital has been invested in microfinance activities. The Coordinated Programme of Social and Economic Development Policies (CPSEDP, 2018-2025) and its ensuing Medium-Term Development Policy Framework (MTDPF, 2022–2025) have outlined some critical roles for microfinance. Policymakers in Ghana have acknowledged the significance of microfinance, and the government has committed to supporting microfinance initiatives through these programmes (NDPC, 2018).

## **2.8. Historical Perspective of Micro Finance and Credit in Ghana**

Microfinance is by no means a novel idea in Ghana. Individuals have traditionally saved money and obtained small loans from self-help individuals and organisations to undertake small retail or agricultural activities (BOG, 2007). Anecdotal evidence indicates that Canadian Catholic missionaries founded the first African credit union in 1955 in Northern Ghana (Boateng, 2015). It is believed that susu, one of Ghana's current microfinance schemes, emanated from Nigeria and was extended to Ghana in the early twentieth century (Affum, 2020b). Microfinance has flourished and evolved into its current form as a result of various financial sector policies and programmes, such as the provision of subsidised credits, the establishment of rural and community banks (RCBs), the liberalisation of the financial sector, and the promulgation of PNDC Law 328 of 1991, which permitted the establishment of various types of non-bank financial institutions, such as savings and loan institutions, finance houses, and microfinancial institutions (Quaye, 2011; Quacoe et al., 2015).

According to Amoah (2008), the microfinance sector in Ghana has undergone the following stages of evolution and development:

- Subsidised credit supply in the 1950s;
- The establishment of the Agricultural Development Bank (ADB) in 1965 with the specific objective of addressing the financial predicaments confronting the agricultural and fishing industries;



- The creation of rural and community banks and the adoption of statutes, such as the condition that commercial banks set aside 20 percent of their total portfolio to support lending to agriculture and small-scale industries in the 1970s and the beginning of the 1980s;
- Transitioning in 1986 from a conservative financial sector regime to a liberalised regime;
- The passage of PNDC Law 328 in 1991 authorised the establishment of various types of non-bank financial intermediaries, such as savings and loans companies and credit unions.

However, Asiamah and Osei (2007) argue that microfinance in Ghana, like microfinance worldwide, has undergone four stages of development. These phases, according to Asiamah & Osei (2007), are described below:

- Governments' provision of subsidised credit began in the 1950s when it was believed that a lack of funds was the greatest barrier to alleviating poverty.
- The second stage occurred in the 1960s and 1970s. It involved micro-credit distribution to low-income individuals, primarily by non-governmental organisations. During this era, sustainability and financial independence were not deemed relevant.
- The 1990s marked the beginning of Phase Three, which saw the formalisation of MFIs.
- In the fourth stage, which began in the mid-1990s, microfinance and its institutions became increasingly commercialised as they were mainstreamed into the financial sector.

According to Kesse (2014), the 1980s marked a watershed moment in the development of microfinance when it became clear that MFIs could offer small loans and savings services at scale while still profiting. For this reason, "microcredit" rose to prominence in development practise (Waller & Woodworth, 2001). According to official records, the origins of micro-savings and microcredit in Ghana can be traced back to the 1930s, when the colonial government introduced legislation for forming cooperative societies among rural farmers as a source of credit to peasant farmers in impoverished rural areas (Benards, 202). Nonetheless, during that period, governments and donors in Ghana primarily provided microfinance services in the form of subsidised rural credit programmes, which frequently resulted in high loan defaults and losses and the inability to reach poor rural households (Kesse, 2014).

At roughly the same time, credit unions (CUs) were first introduced by White Fathers serving in the north of Ghana (Ahorlu, 2009), where poverty rates are disproportionately high. As a result of the success of CUs in alleviating poverty in the White Fathers' parishes, many other religious

organisations and communities opened membership to their village credit unions to everyone living in the area (Mensah, 2016). Since then, the number of credit unions in Ghana has increased to over 400 nationwide (Kessey, 2014). In addition, microsavings were encouraged within the unions so members could apply for microcredit with subsidised interest rates. Furthermore, credit unions offer microcredit for investments in MSMEs to combat poverty (Alesane, 2021). That event served as the starting point for CU's financial assistance to several microinvestors (MSMEs) and support for low-income households in Ghana. Additionally, "susu" clubs, Rotating Savings and Credit Associations (ROSCAs), Accumulating Savings and Credit Associations (ASCAs), and moneylenders are examples of informal financial institutions that provide support to small and medium-sized enterprises (Kessey, 2014).

## **2.9. MSMEs and Access to Finance in Ghana**

Studies have shown that MSMEs' inability to access necessary financial resources hinders their growth (Ahiakpor et al., 2021). Furthermore, according to Adjei (2012), most financial institutions view MSMEs as undesirable business propositions because of the risks associated with financing them. These perceived risks stem from low financial management skills among entrepreneurs, a lack of proper documentation to support loan applications (e.g., cash flow statements, valuation reports, legal fees, evidence of a market for products), and the focus on agro-based business lines (dependent on climate factors and market prices and therefore seen as risky) by many MSMEs (Amoah & Amoah, 2018). Additionally, Ghanaian MSMEs with access to formal financial or commercial finance tend to see their earnings eroded by high interest rates. Consequently, they are frequently unable to satisfy their financial obligations (Ocloo, 2021).

According to the Ghana Statistical Service (2013), while the private informal sector employs most of Ghana's labour force, many micro- and small-scale entrepreneurs face significant obstacles to the growth of viable microenterprises (Adjei, 2010). Recent studies show that many micro, small, and medium-sized enterprises (MSMEs) are severely undercapitalized because they are still in the startup phase and can't get the financial products on the market right now (Abor, 2016). In addition, the country has loan repayment terms among the shortest in the world. As a result, micro, small, and medium-sized enterprises (MSMEs) require long-term financing and working capital (Alfred & Xiao, 2013).

Per Section 13 of the Loans Act of 1970 (Act 335), the GoG is granted the authority to provide a loan guarantee for any foreign lender willing to disburse funds to a Ghanaian organisation. The government must provide a guarantee in accordance with the terms of such a facility. However, even though the GoG has already used this provision by guaranteeing certain bilateral and

multilateral institutions on behalf of selected Ghanaian businesses operating in private and public sectors, no MSME guarantee facilities have yet been implemented.

The government established an Export-Import Bank (EXIM) Guarantee Facility through the Bank of Ghana to provide a loan guarantee programme to support short, medium, and long-term credit requests from primarily viable and well-structured small and medium-sized enterprises (Agyapong, 2020). However, the establishment is hampered in its efforts because the guarantee fund is insufficient to meet the requirements of the MSME sector (Abor, 2016). Moreover, commercial banks' high interest rates, MSMEs' internal structural weaknesses, and the lack of available long-term loan products all contribute to a difficult credit environment for MSMEs (Dzadze et al., 2012).

The micro-sector has traditionally received the majority of MSME sector support, with some assistance going to the small sub-sector in some cases (Domecher et al., 2017). Rural businesses have received much attention to combat poverty and create job opportunities (Oppong et al., 2014). However, most funding structures and business development services are designed to serve either the high end (large corporations) or the low end (microenterprises), primarily focusing on impact and poverty alleviation. The MOTI (2019) states that this has resulted in a "missing middle" challenge. This creates a void in the ecosystem's twilight zone, primarily populated by small and medium-sized businesses that lack capital and access to critical business development services (MOTI, 2019). As a result, if Ghana is to experience economic growth and job creation, the "missing middle" must be addressed holistically (MOTI, 2019).

## **2.10. Evolutionary Theories of Microfinance on MSMEs Financing**

The concept of microfinance was founded on the premise that individuals in developing nations without access to formal banking or monetary systems could benefit from access to formal financial markets through small loans. This means that when given access to credit, many MSMEs could use it profitably to grow their businesses (Ratnawati, 2020b; Bekele & Worku, 2008). As a result, many theories have brought up the issue of the financing gap for MSMEs (Kraus & Litzenberger, 1973; Myers & Majluf, 1984). However, MSMEs cannot obtain credit from the formal financial system (Choudhury & Goswami, 2019; Lin et al., 2022) due to their inability to afford the strict requirements of these financial institutions (Hakeem, 2019; Al Saifi, 2021).

Numerous attempts have been made to bridge this chasm. By instituting measures favouring lenders (MFIs) and MSME operators without concession, these approaches aimed to close the financing gap. Consequently, two models describe microfinance's operation. (1) Group services

in which multiple individuals apply for a loan collectively (Yunus, 1999). (2) According to Schisani and Caiazzo (2018), relationship-based banking dominated the small business and individual entrepreneur banking industry. These models have also been linked to the conventional microfinance Theory of Change (ToC).

Financial intermediaries, such as banks that provide investors with savings loans, facilitate the financial markets. To obtain credit, one must provide collateral or assets that will be liquidated in the event of nonpayment. Unfortunately, conventional banks view the poor as unsuitable borrowers due to their lack of financial collateral (Visconti, 2016). According to Baradaran (2012), this barrier to traditional credit markets frequently forces low-income individuals to borrow on the black market or from payday lenders with exorbitant interest rates. The Grameen Bank "Microlending" Model utilised social capital by utilising the connections and relationships of groups as collateral (Dowla, 2006; Schurmann & Johnston, 2009). Microcredit contracts are frequently structured differently than conventional bank loans. For instance, collateral may be required, or other repayment terms may be established (Arinzeh, 2022). Du Bois (2020) enunciates that the microlending model has become as popular as a fad in economic development. By the 1990s, it had become the most highly lauded and generously funded poverty alleviation policy in the international development community (du Bois, 2020).

Extensive research has revealed the primary characteristics of the traditional microcredit model developed by Grameen Bank in Bangladesh and replicated globally. According to Dowla (2006), the group lending system is based on mutual aid and trust among the group members rather than the threat of imposing social sanctions on a defaulting group member. Mahmud & Osmani (2016) state that a kinship-based rural social structure in dense settlements has benefited microcredit movements. This structure has helped to form microcredit groups from existing networks of relatives, friends, and neighbours. However, there appears to be a moral hazard issue due to the possibility that borrowers, feeling pressured by social or economic forces, will use loans "imprudently" for purposes other than those intended by the lender (Schicks, 2010). This is a problem because it encourages borrowers to disregard the conditions of their loans. However, a more subtle and nuanced kind of ex-ante moral hazard arises from the borrower's so-called "limited liability" while using collateral-free loans for a production project (Mahmud & Osmani, 2016). This can lead to a systematic divergence between the borrower's and the lender's objectives regarding using the loan (Coleman, 1999).

According to Chakravarty & Shahriar (2010), the savings account component of microfinance can also be linked to microcredit. Lenders have the option of including a loan covenant in the

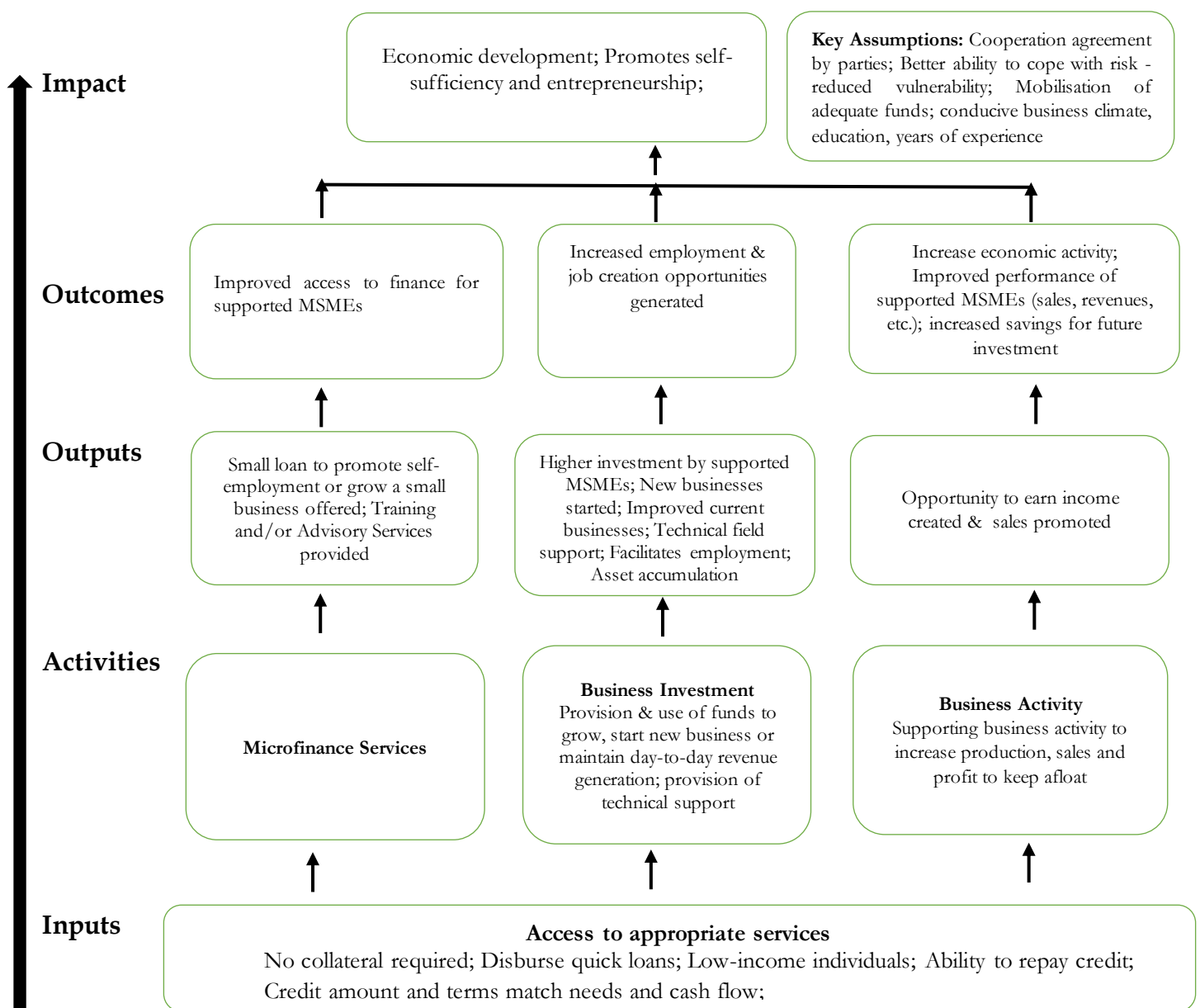
transaction. According to Farag et al. (2013), the loan covenant requires the borrower to deposit some of their future earnings into a savings account at the lending institution. This money will serve as collateral for the loan until it is repaid in full. Therefore, it affords some measure of protection to the creditors. According to Cull & Hartarska (2023), if the borrower successfully repays the loan, the money deposited into the savings account will have accrued interest. The extent to which these theoretical findings are applicable will be determined by how the borrower views their responsibility for repaying the loan. This, in turn, will be determined by evaluating the repayment enforcement mechanisms utilised by the MFIs and estimating the costs associated with defaulting on the loan (Berglind & Karimi, 2008). The cost of non-repayment is high enough to ensure repayment if the borrower does not possess the wherewithal or the necessary cash flows to repay the loan (Vishwanathan, 2018).

Microfinance has been criticised for tending to prey on those in need, much like loan sharks do (Prijadi et al., 2020). Some microloans may have interest rates of up to 30 percent or even more (Corporate Finance Institute, 2022). Additionally, several studies found that borrowers of microloans did not see an increase in their yearly net income (Salia & Mbwambo, 2014; Atmadja et al., 2016; Amsi et al., 2017; Babajide, 2012). Despite the claims, many have also argued that microfinance provides access to financial opportunities for those from developing nations or lower socioeconomic backgrounds (Imran et al., 2022). Two additional benefits of microfinance are fostering financial independence and offering financial resilience to manage sizable unforeseen expenses (Corporate Finance Institute, 2022). Additionally, microfinance enables financial services for people in remote locations without traditional financial institutions (Dang & Vu, 2020). Lastly, microfinance can help people experiencing poverty become more entrepreneurial and grow their businesses (Ullah et al., 2020).

These theoretical perspectives have been applied to the standard Microfinance ToC, which has been used as a construct and tool in programme evaluation (Maitrot & NioZaraza, 2017; Weijermars, 2014). Based on these considerations, it appears that the Theory of Change can and should play an important role in determining the success of impact investments. This is especially important regarding the social and economic impacts on underprivileged communities, households, and individuals. This theory assumes that a poor person will approach a microfinance provider for a loan to start or expand a microenterprise (Hayes, 2020). This microenterprise will generate enough net revenue to repay the loan with significant interest while also profiting enough to raise the individual's or household's standard of living (Mwankemwa, 2022).

The microfinance impact chain is depicted in Figure 1 and consists of several stages. First, the MFI provides non-financial services like group meetings and business training (Abebe & Kegne, 2023). These nonfinancial services are offered in addition to financial services such as loans, savings accounts, and insurance. According to Churchill & Frankiewicz (2006), these financial services effectively help customers manage investment-related risks. Ruben (2001) adds that having access to credit and savings could help smooth consumption and reduce the need for the household to diversify its income. As a result, households could concentrate their efforts on more risk and higher-paying labour to increase their overall income (Barrett et al., 2001). The provision of these services by the MFI positively impacts the domains of rights to sustainable livelihoods through the economic empowerment of businesses (Attefah et al., 2014).

**Figure 1: Theory of Change in Microfinance Empowerment for MSMEs**



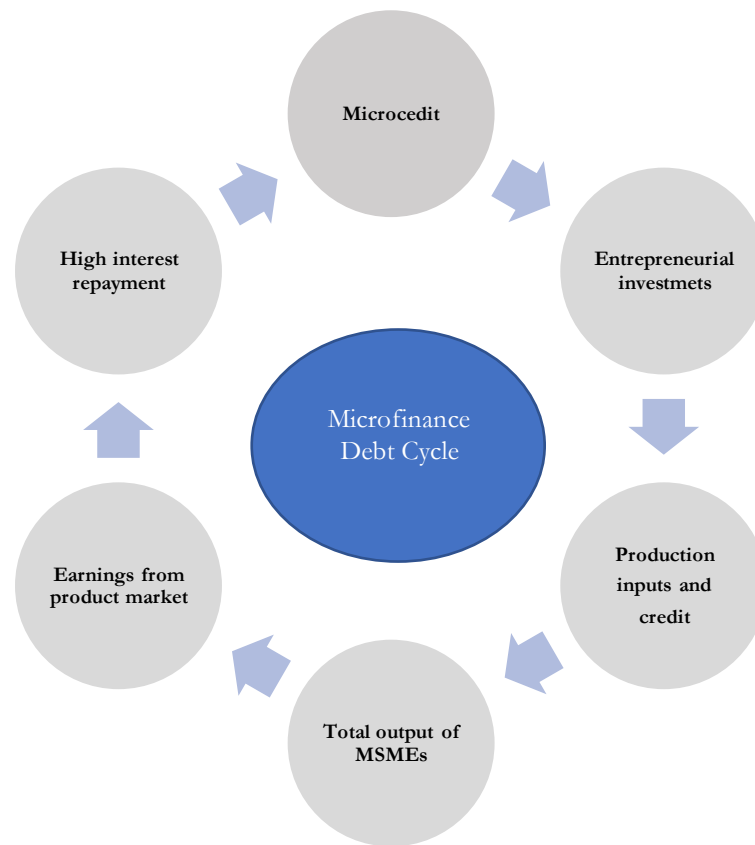
**Source: Authors Construct; 2023**

### **2.11. Rationale for Microfinance and Empowerment of MSMEs: A Conceptual Framework**

Focusing on the growth of MSMEs and the empowerment role traditionally attributed to people of low socioeconomic standing is becoming increasingly important. Bateman & Chang (2012) contend that the microfinance model already contains the elements necessary for its demise as a form of intervention in development. Ledgerwood (1998) asserts that the intent of microfinance in the modern world is to generate sizable profits rather than reduce the poverty that recipients experience. As a consequence of this, microfinance institutions (MFIs) are motivated to sell as much microfinance as they possibly can. Unlike in other product markets (such as the markets for furniture, food, and clothing), it is not difficult to persuade people who are living in poverty that there is no upper limit to the amount of microcredit they can "consume." Both providers and recipients within microfinance are thus automatically stimulated into excessive supply and demand, fueling the inevitable "microfinance bubble" (Bateman & Chang, 2012).

Discussions centred on the study's conceptual framework derived from Kessey's (2014) work on promoting small and medium-sized enterprises (SMEs) in the informal sector of Ghana through microfinance services received. The framework was conceived in six stages, as indicated in Figure 2. The framework was designed to demonstrate the various stages that MSMEs go through, the obstacles they confront at each step, and how those challenges affect their activities. It is predicated on the core concept of economics, which states that business success is determined by the entrepreneur's capacity to anticipate and make decisions about production inputs, technology, productivity, market, earnings, profit, and income consequences.

**Figure 2: Conceptual Model for the Study – Microfinance and Economic Empowerment of MSMEs**



**Source: Author’s Construct; Adapted from Kessey, 2014**

The analytical framework is based on scholarly criticisms that claim microfinance traps "poor people" (entrepreneurs) in a cycle of debt. It undermines the goal of microfinance interventions by having many lenders charge exorbitant interest rates. For instance, the British Broadcasting Corporation (BBC) reported specific claims made by the Palli Karma-Sahayak Foundation (PKSF) in a 2010 report. The body that monitors microfinance described microcredit as a "death trap" for the poor. They contend that many business owners frequently accept microloans without considering that it may take ten or twenty years to repay the loan. In addition, some lenders deduct ten percent of the weekly payment for mandatory savings schemes. This is money that the MFIs then use to lend to other people. Repayment interest rates typically start at about 15 percent. However, it is a flat rate that can soon rise to between 40 percent and 100 percent. Repayments are generally due on loans the first week after they are taken out. This does not give the borrower enough time to establish any income-earning enterprise. To cover those first payments, people often take out further loans from different MFIs (BBC, 2010). This keeps the cycle running, defeating the purpose and objective of microfinance.



## **2.12 Empirical Review of Microcredit Empowerment of MSMEs**

The theories surrounding microcredit have a certain amount of a priori plausibility. However, the only way to differentiate between them is to conduct empirical research to determine which theories appear to fit reality more closely. To accomplish this, researchers have increasingly focused on putting microcredit theories to test against empirical data. On the other hand, statistical tests of the efficacy of particular lending mechanisms may not be possible because there may not be enough variation in the basic features of the existing lending modalities among the MFIs in a country. To address this issue, researchers are utilising proxy information that lies behind the actual workings of the mechanisms, employing sophisticated econometric techniques, and drawing upon experimental behavioural economics tools. This body of literature should not be confused with the more well-known and substantial body of research looking at the empirical measurement of the effect of microcredit on poverty.

In recent years, development organisations have been put under increasing pressure to demonstrate the effectiveness of their activities. Yunus (1999) states that microcredit, in particular, is seen as a potent instrument that can help reduce poverty. Other financial services, such as savings and insurance, as well as non-financial services, such as training and meetings, can be obtained through microfinance in addition to loans. Over the past three decades, numerous impact studies of varying quality have been conducted to evaluate the effects of microfinance. On the other hand, these studies were unable to provide a definitive answer to the question of whether or not microfinance affected the lives of those who were economically disadvantaged.

Kessey (2014) assessed the microcredit promotion of SMEs in the Ghanaian informal sector using descriptive statistics and a quasi-experimental design. The findings revealed that it is challenging for SMEs with low earnings to overcome the financial burdens associated with their businesses. This has made them excessively reliant on MFIs due to the high interest rates charged. Again, the findings demonstrated that MFIs are the principal source of formal credit for Ghana's SMEs. In contrast, they have denied SMEs access to other products offered by MFIs, such as business adversaries and social products. In addition, the study revealed that the amount of savings required for SMEs to qualify for the credit is significant. Therefore, the study concluded that MFIs should re-evaluate to benefit low-income clients.

Similarly, Gakpo et al. (2021) estimated the effect of microfinancing on poverty alleviation and small businesses in Ghana by employing inferential statistics based on Pearson correlation analysis. Contrary to Kessey's (2014) findings, their results demonstrated a positive relationship

between microfinance and small and medium-sized enterprises. However, they found no significant relationships between microfinance interventions, employment rate, and outreach to the vulnerable and marginalised. On the other hand, microfinance programmes were positively correlated with economic growth. Therefore, it was suggested that other economic development variables be studied concerning microfinance to determine how much microfinance influences economic development (Gakpo et al., 2021).

In Côte d'Ivoire, Uwingabiye & Nouwoue (2022) examined the cumulative impact of repeated borrowing from the Première Agency de Microfinance-Côte d'Ivoire (PAMF-CI) on MSMEs. They employed a non-experimental approach to contrast returning customers with new ones. After controlling for vital observable characteristics of these MSMEs, the findings suggested that cumulative positive effects associated with more extended programme participation and subsequent larger loans were strong determinants of business performance and profitability. The results also demonstrated that every additional fund generated nearly double the anticipated revenues and average profits after just one loan cycle. In addition, after the third and fourth loan cycles are repaid, absolute profits are projected to rise significantly when intermediate clients are taken into account on average. Additional research, however, revealed that non-clients who had previously dropped out performed poorly compared to long-term customers and newcomers (Uwingabiye & Nouwoue, 2022).

Farghly et al. (2018) used Structural Equation Modelling (SEM) to empirically investigate the impact of microfinance on the long-term growth of Egyptian MSMEs. The study sought to assess the perceptions and expectations of Egyptian entrepreneurs and MSMEs' managers and employees in charge of banking transactions in MSMEs, as well as to examine the impact of reformed microfinance programmes offered by Egyptian banks under the supervision of the Central Bank of Egypt on the multidimensional sustainability of MSMEs growth. According to the study's findings, microfinance programmes explained 22.1 percent of the variation in sustainable financial growth, with the most significant effect. Their findings also revealed that microfinance accounted for 19.6 percent of the variation in socially sustainable growth. Furthermore, microfinance significantly impacts environmental sustainability regarding acceptability and awareness, accounting for 42.5 percent (Farghly et al., 2018).

Rotich et al. (2015) studied 270 of the 429 MSMEs registered by the Kiambu Municipal Council in Kenya using an explanatory research design to determine how microfinance services affected their success. The study applied multiple regression analysis technique to derive conclusions. According to the study, managerial training, loan grace periods, and access to savings plans all

statistically impact how well MSMEs perform. According to the study's findings (Rotich et al., 2015), improving microfinance provision levels will improve microenterprise performance.

Finally, Uusiku (2019) used a cross-sectional analysis of 45 small businesses to investigate how microfinance activities affected MSMEs' productivity in the Namibian region of Oshana. Multiple regression was used to test the impact of a group of variables (types of microfinance, gender, business location, education, years of existence, and the amount of loan received) on productivity, a proxy for business growth. The sample was taken from a list of MSMEs who had accessed microfinance services offered by the Development Bank of Namibia. According to the study, loans (microcredit), training, and the time the business had been in operation significantly impacted productivity (a proxy for growth). As a result, the main variable of microcredit did not significantly influence the growth of MSMEs. The study contends that gaining access to microcredit cannot by itself result in the expansion of small businesses. However, utilising microcredit to its full potential, which could lead to the expansion of MSMEs, requires combining other crucial factors, such as education and business experience. Likewise, poor management skills fully hindered the MSME's ability to utilise microfinance services (Uusiku, 2019).

In conclusion, the empirical studies reviewed here collectively demonstrate the multifaceted impact of microfinance on MSMEs, highlighting its varying effects on financial growth, business performance, poverty alleviation, and sustainability. These findings lay the groundwork for the present study, which seeks to contribute further insights into the specific dynamics of microfinance and its implications for MSMEs in the context of Asante-Akim Central Municipality.

### **2.13. Deduction from the Literature Review**

This section synthesises the reviewed literature, shedding light on key variables within microfinance and its impact on MSMEs. The literature review discerns that the consequences of microfinance interventions on MSMEs exhibit notable variations across different geographical locations. Theoretical and conceptual frameworks have been framed to show the relationships among microfinance services, business growth, and the entrepreneurial debt burden.

One salient observation from the review is the inherent risk associated with business operations, where entrepreneurs invest capital anticipating returns, making the venture inherently precarious. Microfinance programmes have strict rules about how to pay back loans. Often, the loans must be paid back within the first week. This can be hard for business owners, especially if their early

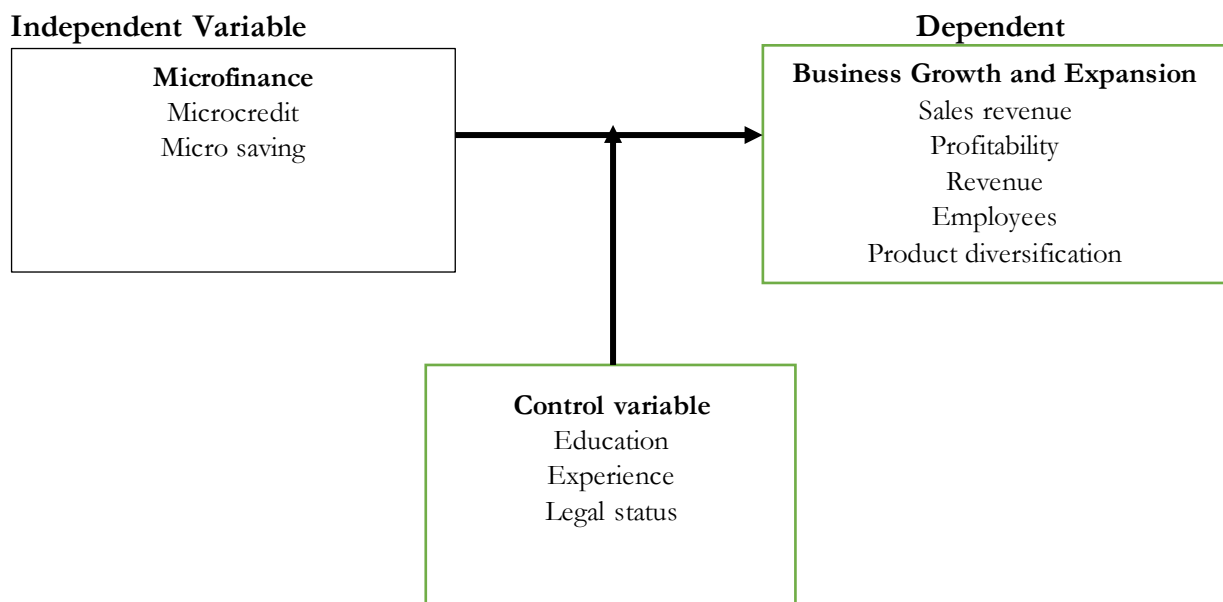
repayment obligations exceed their income. Consequently, entrepreneurs frequently allocate funds to cover these initial payments, potentially limiting their engagement in opportunities with long-term returns.

Furthermore, MFIs strongly emphasise a risk-averse clientele, leading to a premium on high repayment rates and the frequency of repayments. These variables become fundamental in determining the overall rate of return on the investments made by MFIs. The inherent conflict of interest between MFIs and clients is highlighted, especially concerning the often-risky nature of expanding a business and the uncertainties associated with returns.

The effects of microfinance programmes on income are inconsistent within the range of economic outcomes, including income, savings, asset accumulation, and housing. While microfinance has the potential to enhance the profitability of businesses, it also demonstrates a nuanced association, occasionally even displaying a negative correlation with profitability.

In outlining these nuances and complexities, the literature review identifies a critical gap in understanding the contextual dynamics that influence the impact of microfinance on MSMEs. This research addresses this gap by delving into specific aspects or variables such as access to microcredit, interest repayment terms and other controlled variables including education and business experience relevant to this study, providing a more nuanced and contextually grounded understanding of the relationship between microfinance interventions and the multifaceted dimensions of MSME outcomes in AACM.

**Figure 3: Conceptual Framework**



## CHAPTER THREE

### METHODOLOGY

#### 2.1. Research Approach and Paradigm

The research approach is the research plan and procedures that range from general assumptions to detailed data collection methods, analysis, and interpretation (Abutabenjeh & Jaradat, 2018). There are three methods: quantitative, qualitative, and mixed. This study employs a quantitative method based on a deductive research approach. This entails the advancement of a corpus of knowledge resulting from the use of empirical data analysis (Soiferman, 2010).

The study adopts the positivist philosophical principle as its philosophical stance. Positivism is a philosophical position that knowledge of a social phenomenon is based on what can be observed, measured, and recorded, similar to natural science (Iano, 1986; Benton & Craib, 2023). Positivist research examines patterns and relationships between social factors to make accurate predictions about society and social change (Park et al., 2020). In positivist research, the researcher typically seeks relationships or correlations between two or more variables (Lin, 1998). Positivists believe quantitative methods best accomplish this (Tamminen & Poucher, 2020).

The quantitative paradigm is widely associated with scientific inquiry (Gelo et al., 2008). The quantitative paradigm is a way of viewing the world and its things that involves the ability to quantify and 'prove' things (Sullivan & Sargeant, 2011). In this context, quantitative refers to a worldview open to quantification, where study findings are measurable, countable, or can be expressed using numbers and statistics (Ellis, 2014). Quantitative methods enable positivist researchers to collect data from large samples and organise it into data sets, tracking patterns, trends, and correlations and determining cause and effect relationships using statistical analysis (Apuke, 2017).

This study aimed to assess the impact of microfinance services on the economic empowerment of micro, small, and medium-sized businesses. Given the objective nature of the primary research question and the use of measurement in the study, this was a good illustration of a quantitative research approach. One of the distinctive features of a quantitative approach is its emphasis on proving something, typically the superior utility of one treatment over another (Sullivan & Sargeant, 2011). Quantitative research employs a positivist perspective in which evidence is objectively and meticulously gathered to prove a causal model or hypothesis. This quantitative study, therefore, investigated and demonstrated the causal relationship between access to microfinance and the growth of MSMEs.

## **2.2. Research Design**

In social science research, getting relevant information to the research problem usually means figuring out what evidence is needed to test the underlying assumptions of a theory, evaluate a programme, or accurately describe and evaluate the meaning of an observable phenomenon (De Vaus, 2001). Thus, before conducting any research, the researcher must devise a plan for gathering and evaluating data, dealing with problems, and making decisions (Kothari, 2004; Davies & Hughes, 2014). A thorough plan will give the research a direction, sharpen the research methods, and set the study up for success. In the professional world, this well-thought-out plan is called a study design (Bloomfield & Fisher, 2019).

According to Creswell & Creswell (2022), the research design is the method utilised to carry out a study and includes everything from the overarching philosophical presumptions to the interpretation of the findings. This refers to the steps taken during the research process to gather, analyse, and analyse data (Creswell & Creswell, 2022). Accordingly, the research design is described as the blueprint for a scientific study which includes the research methodology, instruments, and strategies to conduct the research by Pandey & Pandey (2021). Similarly, Claybaugh & Zach (2020) define research design as the overall approach taken when conducting research and creates a clear and logical method to address the predetermined research question(s) through the collection, interpretation, analysis, and discussion of data. The overarching strategy and analytical approach for coherently and logically integrating the various study components is thus the research design, which ensures that the research subject is thoroughly investigated (Fan et al., 2022).

A study's design specifies the study type (descriptive, correlational, semi-experimental, experimental, review, meta-analytic) and sub-type (e.g., descriptive-longitudinal case study), research problem, hypotheses, independent and dependent variables, experimental design, and, if applicable, data collection methods and a statistical analysis plan (Creswell, 2014). A research design aims to ensure that the evidence obtained enables the researcher to address the research problem logically and unambiguously (Awe, 2022). When adequately executed, research design can generate repeatable, consistent outcomes when applied in other settings. However, comparable results are only feasible if the research design is reliable (Snyder, 2019).

This study examined the relationship between microfinance and the economic empowerment of MSMEs in the Asante-Akim Central Municipality of Ghana using a cross-sectional survey with a quasi-experimental design. According to Olsen & St George (2004), the cross-sectional study design is one of the most common and well-known study designs. According to Letting et al.

(2012), in this form of research study, either the entire population or a subset thereof is selected, and data are collected from these individuals to answer relevant research questions. The study is cross-sectional because it is conducted at a single point in time or over a brief period. Typically, they are taught to determine the prevalence of the outcome of interest in a given population (Levin, 2006).

According to Eliopoulos et al. (2004), quasi-experiments are studies that evaluate interventions but do not employ randomisation. Similar to Randomised Control Trials (RCT), quasi-experiments seek to establish a causal relationship between an intervention and an outcome (Waddington et al., 2022). This differs from the RCT approach, in which the researcher compares the responses of the treated group (i.e., the beneficiaries) with those of the untreated group (Akobeng, 2005). By adopting a survey strategy in this study, a questionnaire was designed and used to gather data from a sampled cross section of MSMEs that have received microfinance support within a one-time specified duration. Consequently, the study presents and compares statistics for relevant variables for beneficiary MSMEs that have accessed microfinance services in “before” and “after” scenarios to measure the impact and efficacy of rendered support by MFIs to MSMEs.

### **2.3. Sources and Type of Data**

The research depended on both primary and secondary sources of data. The use of secondary data provided further understanding and clarification of the statistical estimates from the analysed primary data to ascertain the effects of microfinance services on MSMEs. Generally, empirical results from literature were obtained from articles, journals, newsletters and institutional records, theses, books, annual reports, and the internet. The data were collected by interviewer-administered questionnaires with 180 sampled registered MSMEs at the AACMA.

### **2.4. Data Collection Method, Tools, and Techniques**

Survey research is defined as "collecting information from a sample of individuals through their responses to questions" (Check & Schutt, 2011, p. 160). Researchers employ surveys to understand better the views of individuals or groups about a given concept or research topic (Yilmaz, 2013). A survey usually consists of well-structured questions, each intended to elicit a particular piece of information. This type of study enables the use of numerous techniques for participant selection, data collection, and instrumentation (Story & Tait, 2019). Survey research may employ quantitative research strategies (e.g., questionnaires with numerically rated items) (Watson, 2015), qualitative research strategies (e.g., open-ended queries) (Braun et al., 2021), or both (i.e., mixed methods) (Brannen, 2017).

The research used interviewer-administered questionnaires as the primary data collection tool. The questionnaire utilised in the study was formulated with the assistance of prior research conducted by Uusiku (2019), Rotich et al. (2015), Alhassan et al. (2016), and the literature reviewed in Chapter 2. The questions were standardised to ensure that all respondents received the same questions with identical wording. The study employed predominantly closed-ended questionnaires with minimal open-ended questions. Using unstructured questions enabled the respondents to freely articulate their perspectives instead of being constrained to providing predetermined answers.

Conversely, the structured questions comprised a predetermined set of responses that the participants could choose from within the specified options. As a result, the researcher obtained the precise information sought within a significant timeframe. Additionally, the information above exhibits a high level of reliability and a decreased probability of bias.

The questionnaire was organised into three sections. The first section gathered demographic information about the demographics of the owner, including age, gender, and educational background. The second section focused on the business's attributes, such as business category, operational duration, and number of employees. Lastly, the final segment centred on the owner's perspective regarding the influence of microfinance on different aspects of their businesses. The assessment was conducted through the utilisation of the Likert scale for rating. The rating scale ranged from 1, representing the lowest level of satisfaction, to 5, illustrating the highest level of satisfaction. In addition, the questionnaire included open-ended questions to elicit respondents' perspectives on the subject matter.

The questionnaires were hand-delivered to the business's specified address to increase the response rate. Respondents were administered questionnaires through interviews. The interviews were conducted in person through scheduled meetings at the respondents' discretion. The administration of questionnaires by interviewers ensured that respondents were representative of the intended population. In addition, the approach used enabled data collectors to clarify ambiguous or unclear queries and responses with respondents.

The data was electronically gathered using the Kobo Collect mobile application. Electronic questionnaires effectively mitigated data quality compromise and reduced time delays associated with manual data entry from paper-based questionnaires. The data collectors uploaded verified and complete data to the web-based database. In addition, paper questionnaires were provided to all data collectors as a contingency measure in case of any technical issues with



electronic devices during the data collection process. Finally, the data from the paper questionnaires were verified and entered into the online database.

## **2.5. Study Population**

The population under study is defined as a group of entities that are the focus of the research (Taherdoost, 2016). Katrina (2012) asserts that the researcher must ascertain the target population, which refers to the specific group of individuals that the researcher intends to conclude about upon completion of the research study. According to Villegas (2020), the study population refers to a cohort selected for research or statistical analysis. It is important to note that this concept is not restricted to the human population exclusively but rather encompasses a collection of characteristics that share a commonality. Various entities such as objects, animals, and measurements possess many characteristics categorised within a group (Villegas, 2020). Therefore, identifying the target population necessitates criteria that demarcate the inclusion and exclusion of respondents (Katrina, 2012).

The population of this study consisted of MSMEs who conduct their businesses within the Asante-Akim Central Municipality in the Ashanti region of Ghana and have benefited from microfinance services for five (5) consecutive years. The time frame is statistically relevant to assess the extent to which microfinance services received yielded the estimated impacts of MSMEs' growth.

More specifically, the study's target population consisted of all MSMEs whose activities included dressmaking, sawmill operators, carpentry works, shoe making, fast food joints, restaurants, small-scale mining, photocopy shop, grinding mill, etc. (see Table 1 for a list of MSMEs covered in the study). This ensured that data from the field covered all businesses run at the study area for accuracy and reliability.

## **2.6. Sampling and Sample Size Determination**

The sampling process entails making statistical inferences based on a population subset. According to Hill & Williams (2012), a sample refers to a selected subset of the population participating in a study. Sampling requires a sampling frame that comprises a roster of respondents who belong to the population under investigation. The literature review (GSS, 2022) indicates that informal activities predominantly characterise the Ghanaian economy. Although there is empirical evidence of numerous MSME activities within the municipality, it is noteworthy that only 328 MSMEs are officially registered with the Asanti Akim Central Municipal Assembly (AACMA). Therefore, the study's sample frame comprised MSMEs operating within the AACMA and receiving microfinance support. The enterprises above were

selected randomly from the MSMEs database that has availed of microfinance services provided by various MFIs in the district.

180 MSMEs were sampled from a sample frame of 328 based on accessibility, availability, and affordability for the cross-sectional data collection. Some respondents had missing variables; hence their denominators (N) were not constant. The quantitative sample size was calculated using the Yamane (1967) formula with an adjustment of 5% to take care of any possible design effect Below is the procedure.

$$n = \frac{N}{1+N(e)^2} \dots\dots\dots(1)$$

Where, N = sampling frame (total number of beneficiaries), n = sample size, e = margin of error (0.05)

$$\frac{328}{1+328(0.05)^2}, n = 180$$

Therefore, the sample size for the study was 180 to ensure that the sampled mean is closer to the population mean and to minimize errors. The quota for each MSMEs category was determined using a probability proportionate quota sample which was determined by the formula below.

$$Q = \frac{\text{MSMEs Category}}{\text{Sample Frame}} \times \text{samplesize} \dots\dots\dots(2)$$

where Q is the quota. This equation was used to generate Table 1 below.

S/n	MSMEs	Total MSMEs	Proportion	Targeted sample size	Surveyed MSMEs	Proportion
1.	Small-scale mining	25	7.62%	14	14	7.78%
2.	Dressmaking	40	12.20%	20	20	11.11%
3.	Carpentry	16	4.88%	10	10	5.56%
4.	Laundry	13	3.96%	8	8	4.44%
5.	DSTV Centre	23	7.10%	12	12	6.67%
6.	Shoe making	30	9.15%	16	16	8.89%
7.	Petty Trading	44	13.4%	22	22	12.22%
8.	Beauty parlour	20	6.10%	11	11	6.11%
9.	Photocopy shop	11	3.35%	7	7	3.89%

10.	Grinding mill	12	3.66%	7	7	3.89%
11.	Construction services	26	7.93%	14	14	7.78%
12.	Pharmacy	10	3.05%	7	7	3.89%
13.	Mobile services	16	4.88%	9	9	5.00%
14.	Food and pub	20	6.10%	11	11	6.11%
15.	Bakery	22	6.71%	12	12	6.67%
<b>Total</b>		<b>328</b>	<b>100</b>	<b>180</b>	<b>180</b>	<b>100</b>

**Table 1: Sampling frame and sample size**

**Source: Author's Construct, 2023**

## 2.7. Sampling Procedure

The Sampling Procedure refers to the methodologies employed to establish contact with participants to obtain essential responses to the research questions. According to Twumasi (1986), the initial step in sample selection is to consider the sampling technique, as emphasised by Jain (1969). The sampling process can be categorised into two distinct methods: random and non-random. According to Sharma (2017), the distinction between the two methods lies in the randomisation of the sampling process. The random sampling method involves the selection of a sample from a predetermined sampling frame, where each unit is afforded an equal opportunity of being chosen. On the other hand, the non-random sampling technique is not reliant on randomisation and frequently yields a sampling bias, as noted by Sharma (2017).

This study employed probabilistic and non-probabilistic sampling techniques, specifically stratification and convenience sampling. Stratification is the systematic procedure of categorising individuals within a given population into distinct and homogeneous subgroups before selecting a sample. The sampling technique known as stratified random sampling is alternatively referred to as proportional random sampling or quota random sampling. The stratified sampling method involves selecting a sample from a population that can be divided into distinct subpopulations. The methodology entailed categorising the enumerated roster of MSMEs (refer to Table 1) into more granular clusters predicated on commonalities or distinguishing features. As a result, the study selected survey participants from each stratum of MSMEs. In addition, the study employed a proportional stratified random sampling technique to appoint a representative sample from the stratified MSMEs groups by their respective population proportions.

The dynamics and spread of MSMEs meant that the convenience sampling technique was suited for selecting the sample from each stratified MSMEs subgroup. Convenience sampling is a type of non-probability sampling technique that involves selecting sample units based on their accessibility to the researcher without any regard for their representativeness or likelihood of being chosen. This can be due to geographical proximity, availability at a given time, or willingness to participate in the research (McCombes, 2023). The choice of convenience sampling technique was motivated by the fact that not all MSMEs listed by the AACMA met the predetermined inclusion criteria for the study. To be eligible for inclusion, an MSME was required to satisfy a criterion of consistently utilising microfinance services for no less than five (5) years.

The researcher intended to employ probabilistic sampling methods, specifically simple random or systematic sampling, which are commonly favoured in similar scenarios due to their ability to provide a representative sample of the population and facilitate the generalisation of findings. However, the researcher acknowledged that these methods may present substantial obstacles, including prolonged data collection periods and increased costs. As an illustration, it is possible to systematically sample an MSME from a given list, even if said MSME has not been the recipient of microfinance services continuously over the last five (5) years. Furthermore, certain MSMEs may have ceased operations or relocated beyond the research's geographical purview, precluding their inclusion in the study. Therefore, the researcher conducted interviews with MSMEs who met the eligibility criteria and were conveniently accessible until the predetermined quota for each subgroup of stratified MSMEs was proportionally achieved. The utilisation of sampling techniques facilitated the acquisition of a sample population that most accurately reflected the people under investigation.

## **2.8. Method of Data Analysis**

The process of analysing data holds the utmost significance in any research endeavour. Data analysis involves applying appropriate statistical or logical techniques to derive meaningful insights from raw data. The process entails the analysis of data obtained via analytical and logical reasoning to identify patterns, relationships, or trends (Nag & Malik, 2023). Akinyode & Khan (2018) assert that data analysis is a systematic procedure researchers use to condense data into a narrative and decipher it to extract valuable insights. The data analysis process encompasses three fundamental stages, with the initial phase being data organisation. The combination of summarisation and categorisation is the second most commonly employed technique for reducing data, as stated by Bhat (2023). The utilisation of data analysis aids in the identification and linkage of patterns and themes within the dataset. The final approach involves

examining data, which researchers conduct either top-down or bottom-up. According to Bhat (2023), the data analysis process enables the researcher to acquire a deeper understanding of the data that has been gathered and to draw well-informed conclusions and judgements. The research utilised quantitative techniques to conduct data analysis. The entire dataset was inputted into the Statistical Package for Social Scientists (SPSS) version 26.0 for analysis.

The quantitative technique comprises two fundamental constituents: descriptive and inferential analyses. The intention of this was to distinguish between inferential statistics and descriptive statistics. The field of descriptive statistics is primarily focused on the characteristics and attributes of the data that has been observed. It does not rely on the presupposition that the data originates from a broader population (Stapor & Stapor, 2020). According to Upton & Cook (2008), statistical inference refers to applying data analysis techniques to deduce characteristics of a fundamental probability distribution. Batterham & Hopkins (2006) posit that inferential statistical analysis is a method of inferring population traits, such as testing hypotheses and generating estimates. The presumption is that the data set under consideration is a sample drawn from a broader population. Sutanapong & Louangrath (2015) assert that inferential statistics employ measurements obtained from the experimental model of subjects to compare treatment groups and draw inferences about the broader population of subjects. The study utilised correlation analysis, paired sample t-test, and regression analysis to investigate the interdependence among variables, assess mean differences to gauge the influence of microfinance support services received and determine the overall impact of microfinance services on the growth and development of MSMEs.

### **2.8.1. Descriptive Analysis**

As defined by Lawless et al. (2010), descriptive analysis is an analytical technique used to organise and summarise data to gain a comprehensive understanding of the phenomenon under investigation. On the other hand, inferential analysis is a statistical technique utilised to generalise the sample to the population from which it was drawn. The study employed descriptive statistics to provide a concise summary of the dataset obtained from a cross-sectional survey, which served as a representative sample of the population of MSMEs under investigation. The data were decomposed into measures of central tendency and variability. The study examined the various measures of central tendency, including the mean as well as measures of variability, such as standard deviation, variance, minimum and maximum variables, kurtosis, and skewness. Examining kurtosis and skewness values provided valuable insights into the normality of the data, which was a prerequisite for conducting inferential statistical analyses.

### **2.8.2. Correlation Analysis**

The concept of correlation pertains to a statistical metric that quantifies the degree of linear association between two variables, implying that they vary consistently (Gogtay & Thatte, 2017). It is a common technique for delineating superficial relationships without suggesting a causal relationship. According to Lindley (1990), the linear correlation coefficient is a measure that quantifies the extent of the relationship between two variables. It is also called a cross-correlation coefficient, which predicts the relation between two quantities (Gogtay & Thatte, 2017).

The measure of the degree of association is determined by a correlation coefficient, which is represented by the symbol  $r$ . The correlation coefficient is measured on a scale ranging from +1 through 0 to -1. The complete correlation between two variables is denoted by either +1 or -1. A positive correlation occurs when an increase in one variable is associated with an increase in the other variable; in comparison, a negative correlation occurs when an increase in one variable is related to a decrease in the other variable. A complete lack of correlation is denoted by the numerical value of 0, as Akoglu (2018) stated. The assumptions underlying this test are that both variables are reasonably plausible. Furthermore, a linear relationship exists between two normally distributed variables, as stated by Binder in 1959.

### **2.8.3. Wilcoxon Signed-Rank Tests**

Given that the study aims to measure the impact of microfinance services on business growth for the same participants, Wilcoxon Signed-Rank Tests were deemed suitable compared to the corresponding parametric paired t-test since the data were not normally distributed. Xu et al. (2017) state that a paired Wilcoxon Signed-Rank Test is employed to assess the means of two samples in situations where each observation in one sample can be matched and the observations are not normally distributed. According to Gerald (2018), a pre-treatment and post-treatment measurement is conducted on a subject.

For the outcomes of Wilcoxon Signed-Rank Tests to be considered valid, it is necessary for the following assumptions to be satisfied: (1) It is recommended to employ a random selection process for the participants from the population. (2) The dissimilarities among the pairs should exhibit an approximately non-normal distribution. (3) Avoiding any extreme outliers in the differences is imperative. Therefore, the following hypotheses guided the study to determine the results.

- $H_0: \mu_1 = \mu_2$  (the two-population means are equal)
- $H_1: \mu_1 \neq \mu_2$  (the two-population means are not equal)

A Wilcoxon Signed-Rank Tests were employed to ascertain whether there were significant changes in the means of business economic empowerment metrics, including revenue, savings, profitability, and employability, before and after receiving microfinance support services. As a result, the effect of size was assessed to determine if the disparity in means is significant enough to be considered practically relevant. The study focused on the duration between the initial acquisition of the MFI loan and the time of the research. The Wilcoxon Signed-Rank Test was computed from:

$$t = \bar{x}_{diff} / (s_{diff} / \sqrt{n}) \dots \dots \dots (3)$$

Where:

- $\bar{x}_{diff}$ : sample mean of the differences
- $s$ : sample standard deviation of the differences
- $n$ : sample size (i.e. number of pairs)

When the p-value associated with the t-test statistic, with (n-1) degrees of freedom, is lower than the predetermined significance level of 0.05, it is appropriate to reject the null hypothesis.

#### 2.8.4. Multiple Regression

The study conducted a multiple regression analysis to investigate the impact of microfinance services on the economic empowerment of MSMEs in AACMA. The study utilised growth as a metric to assess the productivity of MSMEs. The correlation between microfinance services and the resulting growth of businesses has been the subject of thorough investigation, particularly within the theory of change framework. This has been explored in various studies, such as those conducted by Nkurunziza et al. (2018), Balasa (2019), Semegn and Bishnoi (2021), Mutua & Mbuva (2022), and Okoth et al. (2022). Empirical research has demonstrated that there are diverse outcomes observed in various geographical locations. The impact of microfinance services on the growth of MSMEs has been observed to be positive in some regions of the world, while conversely, negative effects have been reported in other areas (Kessey, 2014; Rotich et al., 2015; Farghly et al., 2018; Uusiku, 2019; Gakpo et al., 2021; Uwingabiye & Nouwoue, 2022). This study employs the Ordinary Least Squares (OLS) multiple regression model to assess the degree of influence microfinance support services have on businesses. This aims to either corroborate or deviate from existing literature to enable comparisons with prior studies. Equation (4) displays the implicit model utilised to investigate the correlation between microfinance and the economic empowerment of MSMEs.

$$Growth_i = f(loani, intpi, edui, expri) \dots\dots\dots(4)$$

Equation (4) is then expanded linearly and formulated as in Equation (5):

$$Growth_i = \beta_0 + \beta_1 loani + \beta_2 intpi + \beta_3 edui + \beta_4 expri + \epsilon_i \dots\dots\dots(5)$$

Where *Growth<sub>i</sub>* refers to MSME productivity; *loani* is the amount of loan obtained from MFIs; *intpi* represents the fulfilment of financial obligations (amount paid on loan as interest; interest payment duration; loan grace periods) *edui* is the level of education of the owners; *expri* denotes the number of years in business.

### 2.8.5. Variable description

#### Dependent Variable: Business Growth (Proxy for Growth)

According to Bekele & Worku (2008), the significance of growth cannot be overstated as it is a vital factor for the sustained existence of a business. However, systematically categorising small businesses' problems and growth patterns in a manner beneficial to entrepreneurs appears daunting. This is due to the considerable variation in size and potential for business growth, as Wiklund et al. (2009) noted. Lewis & Churchill (1983) pointed out that these entities exhibit distinctiveness in autonomy in decision-making, diverse frameworks for organising their operations, and varying approaches to management. Zhou & de Wit (2009) assert that the absence of standardised metrics to gauge the growth of micro, small, and medium-sized enterprises is noteworthy. Scholars have employed various metrics to evaluate the growth of businesses, with a predominant focus on business profitability, as evidenced by studies conducted by Johnson et al. (1999), McMahon (2001), Delmar (2019), and Altig (2022).

The World Bank (2007) has noted that measuring profits for businesses lacking formal documentation can be challenging. According to Fowowe's (2017) assertion, objective measures are frequently not easily accessible and are susceptible to subjectivity, manipulation, and incompleteness. As a result, researchers often favour subjective measures when assessing business performance. As per the findings of Atmadja et al. (2016), microenterprises frequently refrain from maintaining a record of their business transactions owing to insufficient accounting or financial management competencies. According to Schayek & Dvir (2009), small enterprises exhibit a high degree of sensitivity regarding divulging information about their financial performance.

Hence, utilising the owner/manager's perceptions as a proxy for business growth to gauge the subjective measure of productivity is an ideal way of obtaining data that may be challenging to



gather (Alfoqahaa, 2018). This study utilises the degree of growth in business as a subjective metric. It designates it as the dependent variable for the regression model. The assessment of business performance is contingent upon the subjective perception of the owner/manager. The respondent is tasked with providing a self-report on the impact of microfinance on diverse facets of their business. Examining microfinance's effect on relevant metrics, including but not limited to business turnover, employee count, market share, total assets, market shares, and profitability, necessitated a subjective assessment by the owner or manager.

The present study is grounded on the Theory of Change and conceptual framework to quantify the level of output a business generates about the resources invested in the task, specifically regarding the microfinance services received. In this research, participants were assessed based on their subjective ratings on a five-point Likert scale (ranging from 1 = strongly disagree to 5 = strongly agree) to determine the extent to which their utilisation of microfinance services had facilitated the growth of their business.

### **Independent Variables**

The selection of variables in this study was informed by empirical literature that identifies the most significant indicators of business growth (Farghly et al., 2018; Uusiku, 2019; Gakpo et al., 2021; Uwingabiye & Nouwoue, 2022). These variables closely correlate with the theoretical frameworks that elucidate the growth of MSMEs. The independent variables encompass both factors and individual variables representing individual, organisational, and environmental determinants.

**Experience:** The entrepreneurial behaviour literature has extensively examined the significance of an entrepreneur's prior experience or knowledge (Rae, 2000; Kellermanns et al., 2008; Mayr, 2021). According to Gimeno et al.'s (1997) research, previous managerial and entrepreneurial experiences positively impact the financial performance of newly established businesses. This study uses the number of years the owner has been operating a business as a proxy to gauge their level of expertise. Entrepreneurs with prior start-up experience enjoy a distinct advantage. They wield more significant influence over decision-making and are more adept at avoiding costly mistakes, unlike their counterparts who lack previous entrepreneurial experience. According to Chandler & Jansen's (1992) research, a positive correlation exists between the number of years of general managerial experience in another business and an individual's self-perceived management competence. This self-perceived competence is also a predictor of growth.

**Level of education:** An entrepreneur's educational background may impact their perception of the business environment and operations. According to Virglerova et al. (2017), an entrepreneur's level of education is positively correlated with their understanding of economic patterns in the market and their ability to make precise predictions about the business environment. Several authors have discovered a positive correlation between the level of education entrepreneurs attain, particularly a university degree, and their business performance regarding sales, profitability, and sustainability (Van der Sluis & Van Praag, 2008). Additionally, it has been observed that entrepreneurs with higher levels of education are better equipped to manage financial risks specific to their firms (Wang, 2012). According to Forbes (2005), individuals with advanced levels of education and professional experience are more adept at efficiently acquiring, compiling, and evaluating information about the accessibility of entrepreneurial prospects. This study controls an entrepreneur's education level as a contributory factor for improved business performance. The purpose is to examine whether a higher level of education for an entrepreneur leads to better business performance.

**Financial services offered by MFIs:** Microfinance is a financial service that caters to low-income individuals who are predominantly self-employed and involved in Income-Generating Activities (IGAs). These services, including microloans, insurance, and savings, are extended to individuals marginalised from the traditional financial system due to their disadvantaged socioeconomic status (Kumar et al., 2015; Helms, 2006). Ali & Alam (2010) assert that microfinance provides essential financial services that enhance employment, productivity, and earning potential. According to Churchill & Frankiewicz (2006), financial services assist microenterprises in effectively managing investment risks. According to Mwankemwa (2022), microenterprises are expected to yield sufficient net revenue to repay the loan with a significant interest rate and enhance their profitability. According to Nichter & Goldmark (2009), external financing of MSMEs is presumed to be more effective. However, it is contended that finance alone may not be adequate for fostering growth. Atmadja et al. (2016) found a positive correlation between financial capital and business growth and survival. Financial capital empowers entrepreneurs to invest in productive activities and capitalise on business opportunities.

Table 2 presents the anticipated direction of the variables under examination, as informed by the theoretical and empirical literature in the preceding sections.

**Table 2: Variables, measurement and expected signs**

<b>Variables</b>	<b>Measurement</b>	<b>Expected sign</b>
<b>Dependent variable</b>		
<b>Level of productivity (a proxy for business growth)</b>	Subjective measure on a five-point Likert scale (ranging from 1 = strongly disagree to 5 = strongly agree) to indicate whether accessing microfinance services impacted production activities contributing to improved business growth.	
<b>Independent variables</b>		
<b>Years of experience in business</b>	Years of general managerial experience positively correlate with self-perceived management competence, which predicts growth. The number of years the owner has been running a business is used as a proxy to measure their experience.	<b>Positive</b>
<b>Owner's level of education</b>	Higher educated entrepreneurs can manage firm-specific financial risks better. Higher entrepreneurs' level of education is significantly related to higher business performance. A dummy variable takes on a value of:  1 = No education,  2 = Primary education  3 = Secondary education/ vocational training,  4 = Tertiary education	<b>Positive</b>
<b>Loan amount received</b>	This is the amount of microloans obtained from MFIs measured in Ghanaian Cedis (GHS)	<b>Positive</b>
<b>Amount paid as interest on the loan</b>	This is measured as the amount paid on the loan as interest. Ghanaian MSMEs with access to formal financial or commercial finance tend to see their earnings eroded by high interest rates. Consequently, they are frequently unable to satisfy their financial obligations.	<b>Positive or Negative</b>
<b>Interest payment</b>	Subjective measure on a five-point Likert scale (ranging from 1 = very low to 5 = very high) to obtain a subjective view on the amount paid on loans as interest.	<b>Positive or Negative</b>

<b>Interest payment duration</b>	Interest payments are paid regularly as agreed upon when the loan was initiated. A dummy variable takes on a value of:  1 = weekly  2 = bi-weekly  3 = monthly	<b>Positive or Negative</b>
<b>Loan grace periods</b>	Subjective measure on a five-point Likert scale (1 = very short to 5 = very long) to obtain a subjective view on the agreed regular scheduled interest payments duration.	<b>Positive or Negative</b>

**Source: Author's Construct, 2023**

## **2.9. Ethical Considerations**

Covering notes will be obtained to inform participants of the study's legitimacy. The interviews took place at a convenient time for the participants. Questionnaires were given out with the aim of the study will be conveyed to the participants. Before conducting interviews and administering questionnaires, participants were asked for their permission. This is critical for obtaining respondents' consent for conducting interviews and participating in a questionnaire survey. Respondents were informed that the information was being sought primarily for academic purposes, and their anonymity and confidentiality of the information provided would be ensured.

## CHAPTER FOUR

### DISCUSSION AND INTERPRETATION

#### 4.1. Introduction

This chapter delves into the critical task of interpreting the research findings, aiming to illuminate the intricate dynamics that underlie the relationship between microfinance support services and the growth trajectory of MSMEs. Drawing upon a rigorous empirical investigation, this chapter adopts a systematic approach, encompassing four distinct levels of analysis, to unravel the complex web of interactions between microfinance and business expansion.

The central objective of this chapter is to provide a comprehensive understanding of the impact of microfinance interventions on the diverse landscape of MSMEs. By employing systematic analysis and evidence-based interpretation, this chapter contributes to a nuanced comprehension of how microfinance interacts with and influences business growth trajectories within the MSME sector.

The chapter is structured as follows: It begins by presenting summary statistics and cross-tabulations to offer an initial glimpse into central tendencies and emerging patterns, providing a foundational understanding of the perceived impact of microfinance on business growth. Subsequently, a Chi-Square analysis is employed to explore the alignment between borrowing intentions and their subsequent impact on business growth. This analysis sheds light on the targeted efficacy of microfinance interventions in fostering growth within specific business contexts.

A bivariate correlation analysis is conducted to quantify the relationship between accessing microfinance and the subsequent business growth trajectory. By identifying correlations, this analysis phase reveals the extent to which microfinance support services intersect with the developmental journey of MSMEs.

The chapter then delves into a more intricate layer of analysis, utilising multiple regression analysis to uncover the causal dimensions that underlie microfinance's influence on business growth. By isolating influential factors, this technique offers insights into the distinct impact of microfinance interventions on the expansion of MSMEs, thus providing a nuanced perspective on the contributing elements.

Lastly, the chapter explores the practical outcomes of microfinance support on selected business performance indicators through Wilcoxon Signed-Rank Tests. By comparing the state before and after microfinance interventions, these tests offer tangible insights into the financial and

operational dimensions of MSMEs, elucidating the tangible impact of microfinance on their growth trajectory.

This chapter embarks on a comprehensive journey through empirical analysis and interpretation, aiming to unravel the intricate and transformative interplay between microfinance support services and the growth of MSMEs. By structuring the analysis into distinct tiers, each offering a unique vantage point, this chapter seeks to provide a holistic understanding of how microfinance collaborations shape and uplift the aspirations of burgeoning businesses within the dynamic landscape of the MSME sector.

## **4.2. Summary Statistics and Cross-Tabulations**

This chapter delves into a comprehensive investigation of the intricate nexus between microfinance support services and the growth dynamics of MSMEs. At the heart of this exploration lies the initial layer of analysis, characterised by summary statistics. These statistics play a pivotal role in the research process, offering an initial glimpse into central tendencies and emerging trends that underlie the perceived impact of microfinance on business growth. They provide a foundational platform upon which subsequent layers of analysis and interpretation are constructed.

The significance of summary statistics lies in their ability to succinctly encapsulate key features of the data, furnishing an overarching perspective of the research variables. These statistics serve as a preliminary lens through which the intricate interrelationships between microfinance interventions and the diverse landscape of MSMEs are discerned. It is imperative to recognise that these initial insights are not mere numerical outputs but serve as a gateway to unravelling the complex mechanisms that drive the symbiotic relationship between microfinance and the growth of businesses.

### **4.2.1. Respondents' Profile**

Table 3 provides a comprehensive overview of the respondents' profiles and their corresponding perceptions concerning the impact of microfinance on business growth. The survey encompassed 180 enterprises, and the table sheds light on the intersections between various demographic characteristics and the perceived influence of microfinance on business growth.

**Gender:** The gender distribution among microfinance beneficiaries, as depicted in Table 3, is notable, with 65.6% of respondents being female and 34.4% male. This gender composition aligns with the prevalent trend observed in many lower-middle-income countries, including Ghana, where women dominate the informal small trading enterprises and engage with

microcredit more extensively than their male counterparts (Thapa & Chowdhary, 2022; Priya et al., 2019; Raman et al., 2022). This gender disparity in microfinance engagement can be attributed to various socio-economic factors and gender roles influencing women's involvement in entrepreneurial activities, particularly in the informal sector (Fapohunda, 2012). In Ghana and similar economies, women's overrepresentation in microfinance beneficiary populations is linked to their prominent role in informal trading enterprises (Naami, 2017; Ronald et al., 2014). Women often engage in petty trading, market vending, and other small-scale ventures, which fall within the purview of microfinance services. The informal sector is a crucial avenue for income generation, especially for women with limited access to formal employment opportunities (Chant & Pedwell, 2008). Consequently, women's higher participation in microfinance programs aligns with their entrepreneurial endeavours in the informal sector.

The gender disparity in microfinance participation underscores broader gender-related disparities that can impact business growth outcomes. Research indicates that women entrepreneurs might face challenges, including limited access to financial resources, restricted mobility, and discriminatory social norms (Reshi & Sudha, 2023). These challenges can hinder their ability to access growth-enabling resources such as capital, technology, and market opportunities. As a result, female-owned businesses may experience slower growth trajectories than men-led ones.

As a result, microfinance institutions often focus on providing microcredit as a means of financial inclusion for marginalised populations, including women (Singh & Yadav, 2012). Microcredit can empower female entrepreneurs by offering them access to capital to invest in their businesses and expand their operations (Sharma et al., 2023). Microcredit often provides a pathway for women to transition from subsistence activities to more sustainable and scalable ventures (Daher et al., 2022). This aligns with the study's context, where many female microfinance beneficiaries agreed with microfinance's positive impact on business growth.

**Age:** The age distribution of the surveyed microfinance beneficiaries was categorised into three groups: 18-35, 36-60, and above 60. Notably, the age group 18-35 demonstrated the highest proportion (49.2%) of agreement regarding the positive impact of microfinance on business growth. Existing research sheds light on the relationship between age and business growth, indicating that younger entrepreneurs often possess attributes conducive to successful business expansion (Cheng et al., 2021).

Younger entrepreneurs, typically within the 18-35 age bracket, tend to exhibit higher adaptability to dynamic business environments (Johnson, 2004). This adaptability enables them to respond effectively to changing market trends, consumer preferences, and technological advancements,

all contributing to sustained business growth. Additionally, the propensity for innovation among younger entrepreneurs allows them to introduce novel products or services that can attract a broader customer base and enhance competitiveness (St-Pierre et al., 2015).

The age group 18-35 also tends to be more open to adopting new technologies, which can significantly improve business efficiency and customer outreach (St-Pierre et al., 2015). Embracing digital tools and platforms can streamline operations, reduce costs, and facilitate direct customer engagement. This technological orientation positions younger entrepreneurs to tap into online markets and explore digital marketing strategies, potentially accelerating their business growth trajectories (Tolstoy et al., 2022). In this study, the higher agreement among the 18-35 age group with the positive impact of microfinance on business growth aligns with the notion that younger entrepreneurs possess attributes that can drive business expansion.

**Level of Education:** The distribution of respondents' education levels spanned from no education to tertiary education. Notably, a trend emerged where a higher level of education correlated with a greater agreement towards the positive impact of microfinance on business growth. This observation resonates with the existing body of literature that underscores the role of education in shaping entrepreneurial outcomes (Brown et al., 2017; White & Anderson, 2019).

Entrepreneurs with higher levels of education tend to possess a broader skill set and knowledge base that are instrumental in navigating the multifaceted landscape of business operations (Adams, 2016; Martinez et al., 2018). Education equips entrepreneurs with analytical and problem-solving capabilities, enabling them to address challenges more effectively and identify growth opportunities (Miller & Baker, 2021; Garcia & Lee, 2019). Moreover, educated entrepreneurs are more likely to engage in strategic planning, market research, and financial management, collectively contributing to sustainable business growth (Thomas & Clark, 2018; Rodriguez & Smith, 2022).

The positive correlation between higher education levels and agreement with microfinance's impact on business growth can be attributed to several factors. Firstly, educated entrepreneurs often better understand market dynamics and consumer behaviour, enabling them to tailor their products or services to meet evolving demands. This adaptability enhances their competitive edge and positions them for growth (Brown et al., 2017; Martinez et al., 2018).

Secondly, educated entrepreneurs are more adept at accessing and interpreting relevant information, allowing them to make well-informed decisions about business expansion, investment, and risk management. This informed decision-making is vital for seizing growth opportunities and mitigating potential setbacks (Johnson & Williams, 2020; Adams, 2016).

Lastly, education fosters an entrepreneurial mindset characterised by innovation and a willingness to explore new avenues. Educated entrepreneurs are more likely to recognise market gaps and innovate to



fill them, which can result in the development of unique value propositions that attract customers and fuel growth (White & Anderson, 2019; Garcia & Lee, 2019).

In the context of this study, the observed link between education levels and agreement with microfinance's positive impact sets the stage for exploring how education interacts with microfinance utilization and actual business growth outcomes (Smith, 2018).

**Table 3: Summary statistics of the respondents' profile and corresponding perceived impact on business growth**

Variables	Categories	Total N (%)	Perceived impact of microfinance on business growth				
			Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
<b>Demographic Characteristics of Microfinance Beneficiaries</b>							
Gender	Male	62 (34.4)	12 (44.4)	21 (38.2)	18 (28.6)	9 (34.6)	2 (22.2)
	Female	118 (65.6)	15 (55.6)	34 (61.8)	45 (71.4)	17 (65.4)	7 (77.8)
Age	18-35	83(46.1)	13(48.1)	23 (41.8)	31(49.2)	13 (50.0)	3 (33.3)
	36-60	96(53.3)	13(48.1)	32(58.2)	32 (50.8)	13 (50.0)	6 (66.7)
	Above 60	1(0.6)	1(3.7)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
Level of education	Primary education	53 (29.4)	7 (25.9)	22 (40.0)	18 (28.6)	3 (11.5)	3 (33.3)
	Secondary education	34 (18.9)	8 (29.6)	9 (16.4)	13 (20.6)	3 (11.5)	1 (11.1)
	Technical/Vocational Training	23 (12.8)	2 (7.4)	8 (14.5)	6 (9.5)	5 (19.2)	2 (22.2)
	Tertiary education	29 (16.1)	1 (3.7)	1 (1.8)	12 (19.0)	12 (46.2)	3 (33.3)
	No education	41 (22.8)	9 (33.3)	15 (27.3)	14 (22.2)	3 (11.5)	0 (0.0)
Years of running a business (length of time in business)	3-4	17 (9.4)	2 (7.4)	6 (10.9)	4 (6.3)	4 (15.4)	1 (11.1)
	5-6	98 (54.4)	11 (40.7)	31 (56.4)	36 (57.1)	15 (57.7)	5 (55.6)
	Above 6	65 (36.1)	14 (51.9)	18 (32.7)	23 (36.5)	7 (26.9)	3 (33.3)
Level of knowledge about business management skills	Very Low	11 (6.1)	3 (11.1)	5 (9.1)	3 (4.8)	0 (0)	0 (0)
	Low	39 (21.7)	9 (33.3)	15 (27.3)	7 (11.1)	5 (19.2)	3 (33.3)
	Medium	85 (47.2)	13 (48.1)	30 (54.5)	32 (50.8)	7 (26.9)	3 (33.3)
	High	31 (17.2)	1 (3.7)	5 (9.1)	16 (25.4)	8 (30.8)	1 (11.1)
	Very High	14 (7.8)	1 (3.7)	0 (0)	5 (7.9)	6 (23.1)	2 (22.2)
Level of knowledge about the different types of	Very unknowledgeable	9 (5.0)	7 (25.9)	2 (3.6)	0 (0)	0 (0)	0 (0)
	Somewhat unknowledgeable	27 (15.0)	6 (22.2)	10 (18.2)	7 (11.1)	2 (7.7)	2 (22.2)

Variables	Categories	Total N (%)	Perceived impact of microfinance on business growth				
			Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
microfinances available for business purposes	Neutral	89 (49.4)	10 (37.0)	35 (63.6)	31 (49.2)	10 (38.5)	3 (33.3)
	Somewhat knowledgeable	35 (19.4)	4 (14.8)	7 (12.7)	18 (28.6)	6 (23.1)	0 (0)
	Very knowledgeable	20 (11.1)	0 (0)	1 (1.8)	7 (11.1)	8 (30.8)	4 (44.4)

**Source: Author's Construct, 2023; based on Field Survey Data**

**Years of Running a Business:** The distribution of respondents based on their years of business experience was categorised into three groups: 3-4 years, 5-6 years, and above 6 years. Interestingly, those with 5-6 years of business experience demonstrated the highest level of agreement (57.7%) regarding the positive impact of microfinance on business growth. This observation aligns with established research that underscores the influential role of business experience in shaping entrepreneurial trajectories (Martinez et al., 2016; Garcia & Lee, 2018).

Entrepreneurs with 5-6 years of business experience are situated where their familiarity with industry dynamics, market trends, and operational challenges is considerably advanced (Clark & White, 2017; Rodriguez, 2022). This accumulated experience gives them crucial insights for making informed decisions and navigating complex business landscapes (Miller, 2019; Thomas, 2020).

Business experience often equips entrepreneurs with the ability to anticipate and manage risks more effectively (Johnson & Martinez, 2019; Adams & Brown, 2021). Over time, entrepreneurs develop a deeper understanding of their target audience, competition, and external factors influencing their business environment. This knowledge empowers them to adapt their strategies, pivot when necessary, and capitalise on emerging opportunities (Wilson & Garcia, 2018; Taylor & Davis, 2021).

Moreover, entrepreneurs with moderate business experience, such as those with 5-6 years, will likely have passed the initial stages of establishing a business. They have surmounted the hurdles associated with startup challenges and have gained valuable insights into operational efficiency, resource allocation, and customer preferences. This solid foundation allows them to shift their focus towards growth-oriented strategies (Anderson et al., 2019; Martinez & Clark, 2022).

The strong correlation between 5-6 years of business experience and agreement with the positive impact of microfinance on business growth suggests that microfinance interventions are particularly resonant with entrepreneurs who have reached a pivotal stage in their business journey. These entrepreneurs are primed to leverage microfinance institutions' financial support

and resources to scale their operations, invest in expansion, and pursue new market opportunities (Smith & Williams, 2020; Brown, 2023).

**Level of Knowledge about Business Management Skills:** The respondents' self-assessed knowledge about business management skills yielded intriguing findings. Notably, those who indicated a "high" level of knowledge demonstrated the highest level of agreement (30.8%) regarding the positive impact of microfinance on business growth. This observation resonates with the notion that robust business management skills can be pivotal in shaping business growth trajectories (Clark & White, 2018; Taylor, 2021).

Entrepreneurs with a high level of business management skills possess a comprehensive understanding of various aspects crucial for business success (Miller, 2016; Rodriguez & Smith, 2019). These skills encompass financial management, marketing strategies, operational efficiency, and strategic planning (Adams, 2021; Brown et al., 2023). Such proficiency empowers entrepreneurs to make well-informed decisions, allocate resources effectively, and capitalise on growth opportunities (Thomas & Clark, 2017; Garcia & Lee, 2020).

The strong correlation between a high level of self-assessed business management skills and agreement with the positive impact of microfinance suggests that these skills amplify the benefits derived from microfinance interventions (Smith & Johnson, 2018; Wilson, 2021). Entrepreneurs with a solid grasp of business management are better positioned to allocate the financial resources obtained through microfinance loans strategically (Anderson et al., 2022). They can use these funds to enhance marketing efforts, optimise production processes, and invest in areas that directly contribute to business growth (Martinez & Brown, 2019; Thomas & Davis, 2022).

Moreover, entrepreneurs with advanced business management skills are likelier to develop and implement effective growth strategies (Doe, 2020; Wilson & Garcia, 2022). They can identify untapped market segments, adapt to changing consumer preferences, and expand their product or service offerings in a manner that resonates with their target audience (Smith & Williams, 2021; Adams, 2023). This adaptability and agility are critical for sustained business growth, especially in dynamic and competitive market environments (Johnson & Martinez, 2020; Taylor & Baker, 2023).

**Level of Knowledge about Different Types of Microfinances:** Examining respondents' self-assessed knowledge levels about different microfinance types offers noteworthy insights. Particularly, those who characterised themselves as "very knowledgeable" about various types of microfinance exhibited the highest level of agreement (30.8%) regarding the positive impact of microfinance on business growth. This observation underscores the significance of understanding the diverse microfinance options available for entrepreneurs.

Entrepreneurs who possess in-depth knowledge about different types of microfinance are better positioned to make informed decisions regarding which financial products align best with their business needs and growth objectives (Rodriguez & Thomas, 2017; Miller, 2019). Microfinance encompasses various financial services beyond traditional loans, including microcredit, savings accounts, insurance, and financial training (Brown & Adams, 2021; Johnson, 2022). Entrepreneurs well-versed in these options can strategically select and utilise microfinance services that offer the greatest value to their specific business context (Garcia & Lee, 2020; Thomas & Baker, 2022). For instance, a nuanced understanding of microcredit terms and repayment structures can enable entrepreneurs to deploy borrowed funds optimally, fostering business expansion (Martinez, 2021).

Furthermore, entrepreneurs with heightened awareness of microfinance options are better equipped to create synergies between these services and their business strategies. They can leverage microfinance for capital infusion and risk mitigation through insurance and cultivating financial discipline through savings (Doe, 2022; Anderson et al., 2022).

***"We provide financial education workshops to enhance our clients' understanding of managing their business finances." - Interviewed Microfinance Officer.***

The correlation between entrepreneurs' self-assessed high levels of knowledge about different types of microfinances and their agreement with the positive impact of microfinance on business growth underscores the importance of education and awareness in leveraging microfinance effectively (Smith & Brown, 2020; Taylor & Johnson, 2021). This finding accentuates the need for targeted financial education and literacy initiatives to enhance entrepreneurs' capacity to harness microfinance for sustained business growth (Brown, 2021; Martinez & Clark, 2022).

#### **4.2.2. Business Profile**

**Years of Business Existence and Number of Employees:** The summary statistics about the distribution of years of business existence and the number of employees shed light on the temporal and operational dimensions of the surveyed businesses. The data indicates that, on average, the businesses included in the survey had existed for approximately 7.76 years, with a median of 7 years. This distribution reveals a relatively balanced mix of businesses across different stages of maturity. This variation in the age of businesses suggests that the sample encompasses enterprises at various points along their growth trajectories. Such diversity in the years of business existence is relevant for understanding the impact of microfinance on growth, as the business's developmental stage can influence how microfinance interventions are perceived and utilized.

Moreover, the average number of employees across the surveyed businesses was 2.18, with a median of 2 employees. The majority of businesses reported having between 1 to 5 employees. This observation aligns with the common characteristics of micro and small enterprises, where limited workforce capacity is a defining feature (Abor & Quartey, 2010). The prevalence of such enterprises in the sample underlines the significance of microfinance support, which often targets smaller businesses that might face challenges accessing traditional financing sources (Addae-Korankye, 2020).

The combination of years of business existence and the number of employees reflects the overall nature of the businesses within the sample—primarily micro and small enterprises. These enterprises contribute to economic growth and job creation, particularly in lower-middle-income countries (Babajide, 2012). Their presence in the sample emphasizes the relevance of assessing the impact of microfinance on businesses that constitute the backbone of many economies.

The diverse range of years of business existence and the predominance of micro and small enterprises underscore the importance of exploring the relationship between microfinance and business growth across different business maturities and sizes. This variation in business characteristics allows for a comprehensive understanding of how microfinance influences growth trajectories in a dynamic and multifaceted entrepreneurial landscape.

Table 4 presents summary statistics of the business profiles and their corresponding perceived impact on business growth.

**Legal Status of Business:** The analysis of the legal status of businesses provides insights into the diversity of business forms represented among the respondents. The data shows that various legal forms of businesses were present in the sample, with distinct proportions. Specifically, limited liability businesses constituted 10.0% of the sample, sole ownership businesses represented 45.6%, family enterprises accounted for 29.4%, and partnerships comprised 15.0% of the total respondents.

Notably, the distribution of legal business forms is varied, reflecting the multifaceted landscape of entrepreneurial endeavours. Different legal forms come with unique benefits, obligations, and governance structures, which can influence how businesses operate and grow (Attrams & Tshehla, 2022). Importantly, the analysis reveals interesting patterns regarding the perceived impact of microfinance on business growth based on the business's legal status.

Of particular interest is the observation that businesses operating as limited liability and sole ownership entities exhibited significant levels of agreement (42.3% and 47.6%, respectively) with

the positive impact of microfinance on business growth. This finding suggests that businesses structured as limited liability or sole ownership might be more inclined to perceive microfinance as a catalyst for their growth. These results reflect the larger Ghanaian economy, largely informal and dominated by sole proprietors (Asare et al., 2015).

The legal status of a business holds implications beyond mere organizational formalities. It can significantly shape a business's access to financing options, its ability to attract investments, and its governance structures (Teece, 1996). Limited liability businesses, for example, might have access to a wider range of financing sources due to the separation of personal and business liabilities. Similarly, sole-ownership businesses might have more streamlined decision-making processes (Gitman et al., 2015).

These legal attributes can influence the resources businesses have, impacting their growth potential. The alignment between the legal status of a business and its perception of microfinance's positive impact suggests a relationship between structural attributes and growth perspectives. Overall, this analysis underscores the importance of considering the legal context in understanding how microfinance is perceived as a driver of business growth across various business forms.

**Table 4: Summary statistics of the business profile and corresponding perceived impact on business growth**

Variables	Categories	Total N (%)	Perceived impact of microfinance on business growth				
			Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
<b>Business Characteristics</b>							
Legal status of business	Limited liability	18 (10.0)	0 (0)	2 (3.6)	3 (4.8)	11 (42.3)	2 (22.2)
	Sole Ownership	82 (45.6)	19 (70.4)	27 (49.1)	30 (47.6)	4 (15.4)	2 (22.2)
	Family Enterprise	53 (29.4)	7 (25.9)	18 (32.7)	17 (27.0)	8 (30.8)	3 (33.3)
	Partnership	27 (15.0)	1 (3.7)	8 (14.5)	13 (20.6)	3 (11.5)	2 (22.2)

Source: Author's Construct, 2023; based on Field Survey Data

The findings from this comprehensive analysis shed light on the intricate interplay between distinct business characteristics and the perceived impact of microfinance on business growth. Notably, the legal structure under which a business operates emerges as a key factor shaping entrepreneurs' perceptions of how microfinance influences their growth trajectories. Particularly, businesses organized as limited liability entities or sole proprietorships exhibit a heightened alignment with positive perceptions regarding the impact of microfinance. This alignment is significant, as it suggests that the inherent advantages associated with limited liability and sole ownership structures, such as enhanced liability protection and autonomous decision-making, may predispose these businesses to more favourable interpretations of microfinance's contributions. This resonance might underscore the compatibility of certain business frameworks with the advantages microfinance brings.

Moreover, the distribution patterns observed in the years of business establishment and the tally of employees spotlight the remarkable diversity in business maturity stages encapsulated within the sample. This diversity in temporal and operational dimensions presents a unique opportunity to probe the intricate interplay between business experience, scale, and the utilization of microfinance in influencing growth outcomes. For instance, businesses with a more extensive history might have honed strategies to effectively harness microfinance for expansion initiatives. Conversely, smaller enterprises might leverage microfinance to catalyze initial phases of growth and development.

This nuanced amalgamation of business characteristics underscores the multifaceted nature of microfinance's impact on diverse businesses. It illuminates the intricate web of factors that can shape entrepreneurs' perceptions of microfinance's role in bolstering growth trajectories. By uncovering these connections, the study offers a granular comprehension of how microfinance aligns with distinct business profiles, informing policymakers, financial institutions, and entrepreneurs about the nuanced ways microfinance interventions can be tailored to optimize growth outcomes across various entrepreneurial landscapes.

#### **4.2.3. Accessing Microfinance Services**

Table 5 presents summary statistics of the subjectivity of microfinance support services received and their corresponding perceived impact on business growth. The data reveals insights into the relationships between microfinance service attributes and entrepreneurs' perceptions of their impact on business growth.

**Ease of Obtaining Microfinance:** The analysis of respondents' perceptions regarding the ease of obtaining microfinance services for business purposes reveals an interesting pattern. Among

those who participated in the survey, various degrees of ease were reported, ranging from "very difficult" to "very easy." Remarkably, respondents who indicated that obtaining microfinance was "somewhat easy" exhibited the highest level of agreement (42.3%) with the positive impact of microfinance on business growth. This finding suggests a noteworthy connection between the perceived ease of accessing microfinance and the perceived positive influence of microfinance on business growth.

***“To access our services, clients go through a simple application process that involves documentation and credit assessment.” - Interviewed Microfinance Officer***

Entrepreneurs who find it relatively easier to access microfinance services might experience a smoother process of obtaining financial support, leading to positive perceptions of its contribution to business growth. This alignment implies that businesses facing fewer challenges in securing microfinance are more likely to associate such support with improved growth prospects (Mendoza et al., 2023). It also underscores the importance of streamlined and accessible microfinance services in fostering a conducive environment for business growth (Muralidhar, 2016).

**Frequency of Seeking Microfinance Assistance:** The frequency with which businesses seek microfinance assistance unveils intriguing insights into their perceived impact on business growth. Notably, businesses that reported seeking microfinance assistance "rarely" displayed a remarkably strong agreement (65.4%) with the positive impact of microfinance on business growth. This observation suggests a nuanced relationship between the frequency of seeking financial assistance and entrepreneurs' perception of the positive role of microfinance in fostering growth.

The finding implies that businesses with more established financial structures, which require occasional rather than constant support, are more likely to perceive microfinance as positively influencing their growth trajectory. It suggests that well-established businesses might leverage microfinance strategically, perhaps for expansion or overcoming specific challenges. As a result, such businesses are more inclined to attribute their growth to microfinance, reflecting a tailored approach that aligns with their financial needs.

Together, the analysis of ease of obtaining microfinance and the frequency of seeking assistance highlights the critical role of microfinance accessibility and alignment with business needs in shaping entrepreneurs' perceptions of its impact on business growth. These findings underscore



the necessity for microfinance services that are not only easily accessible but also adaptable to the varying financial demands of different types of businesses (Mensah, 2016).

**Interest Payment Amount:** The analysis of respondents' subjective views on the amount paid as interest on loans provides valuable insights into their perception of the impact of microfinance on business growth. Notably, those who regarded the interest payment amount as "moderate" exhibited a substantial agreement (53.8%) with the positive impact of microfinance on business growth. This observation indicates a significant relationship between entrepreneurs' perception of interest payment amounts and their view of microfinance's influence on growth.

The finding suggests that businesses that consider the interest payment amount to be manageable are more likely to associate microfinance with a positive impact on their growth prospects. Entrepreneurs who perceive the interest payments as moderate might view them as reasonable relative to the financial benefits and growth opportunities facilitated by microfinance. This alignment implies that an appropriate balance between interest payments and growth outcomes is crucial for fostering a positive perception of microfinance's impact on business growth (Mwankemwa, 2022).

**Interest Payment Frequency:** The frequency of interest payment, specifically the structure of instalments (EMIs), is another attribute that influences entrepreneurs' perception of microfinance's impact on business growth. Businesses with "monthly" instalment payments displayed the highest level of agreement (46.2%) with the positive impact of microfinance on business growth (Table 5). This finding suggests a significant connection between the frequency of interest payments and the perception of sustained positive effects on growth.

**Table 5: Summary statistics of the subjectivity of microfinance support services received and perceived impact on business growth**

Variables	Categories	Total <i>N</i> (%)	Perceived impact of microfinance on business growth				
			Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
<b>Accessing microfinance services</b>							
Ease of obtaining microfinance for business purposes	Very difficult	8 (4.4)	0 (0)	5 (9.1)	1 (1.6)	2 (7.7)	0 (0)
	Somewhat difficult	36 (20.0)	8 (29.6)	15 (27.3)	7 (11.1)	4 (15.4)	2 (22.1)
	Neutral	45 (25.0)	8 (29.6)	12 (21.8)	21 (33.3)	3 (11.5)	1 (11.1)

Variables	Categories	Total N (%)	Perceived impact of microfinance on business growth				
			Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
	Somewhat easy	63 (35)	5 (18.5)	17 (30.9)	27 (42.9)	11 (42.3)	3 (33.3)
	Very easy	28 (15.6)	6 (22.2)	6 (10.9)	7 (11.1)	6 (23.1)	3 (33.3)
Frequency of seeking microfinance assistance	Very Frequently	27 (15.0)	5 (18.5)	10 (18.2)	8 (12.7)	3 (11.5)	1 (11.1)
	Occasionally	88 (48.9)	15 (55.6)	29 (52.7)	35 (55.6)	6 (23.1)	3 (33.3)
	Rarely	65 (36.1)	7 (25.9)	16 (29.1)	20 (31.7)	17 (65.4)	5 (55.6)
Subjective view on the amount paid on loans as interest (reverse score)	Very high	33 (18.3)	8 (29.6)	12 (21.8)	7 (11.1)	5 (19.2)	1 (11.1)
	High	84 (46.7)	15 (55.6)	33 (60.0)	31 (49.2)	4 (15.4)	1 (11.1)
	Moderate	51 (28.3)	4 (14.8)	8 (14.5)	22 (34.9)	14 (53.8)	3 (33.3)
	Low	12 (6.7)	0 (0)	2 (3.6)	3 (4.8)	3 (11.5)	4 (44.4)
	Very Low	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Interest payment frequency (instalment/EMI) on loan	Weekly	80 (44.4)	21 (77.8)	31 (56.4)	22 (34.9)	5 (19.2)	1 (11.1)
	Bi-weekly	56 (31.1)	4 (14.8)	18 (32.7)	23 (36.5)	9 (34.6)	2 (22.2)
	Monthly	44 (24.4)	2 (7.4)	6 (10.9)	18 (28.6)	12 (46.2)	6 (66.7)
Subjective view on the loan grace period for interest payments	Very Short	46 (25.6)	17 (63.0)	15 (27.3)	11 (17.5)	3 (11.5)	0 (0)
	Short	53 (29.4)	8 (29.6)	25 (45.5)	15 (23.8)	4 (15.4)	1 (11.1)
	Moderate	66 (36.7)	2 (7.4)	13 (23.6)	32 (50.8)	17 (65.4)	2 (22.2)
	Long	14 (7.8)	0 (0)	2 (3.6)	5 (7.9)	2 (7.7)	5 (55.6)
	Very Long	1 (0.6)	0 (0)	0 (0)	0 (0)	0 (0)	1 (11.1)
Satisfaction with loan grace period for interest payments	Extremely dissatisfied	41 (22.8)	21 (77.8)	11 (20.0)	7 (11.1)	1 (3.8)	1 (11.1)
	Slightly dissatisfied	59 (32.8)	5 (18.5)	26 (47.3)	22 (34.9)	4 (15.4)	2 (22.2)
	Neither satisfied nor dissatisfied	59 (32.8)	0 (0)	16 (29.1)	32 (50.8)	9 (34.6)	2 (22.2)
	Very satisfied	18 (10.0)	1 (3.7)	2 (3.6)	2 (3.2)	12 (46.2)	1 (11.1)
	Extremely satisfied	3 (1.7)	0 (0)	0 (0)	0 (0)	0 (0)	3 (33.3)

**Source: Author's Construct, 2023; based on Field Survey Data**

The observation implies that businesses with monthly payment structures experience consistent financial outflows, enabling more predictable financial management. The regularity of monthly payments aligns with the rhythm of business operations and allows for better planning and allocation of funds, contributing to stable business growth. This finding underscores the importance of well-structured payment frequencies in enhancing entrepreneurs' confidence in microfinance as a facilitator of sustainable growth (Dag et al., 2023).

Taken together, the analysis of subjective views on interest payment attributes highlights the role of perceived manageability and consistency in shaping entrepreneurs' perception of microfinance's impact on business growth. The findings underscore the need for microfinance providers to offer interest rates and payment frequencies that align with businesses' financial capabilities and operational rhythms, ultimately enhancing the perceived positive effects on growth (Nkuah et al., 2013).

**Loan Grace Period:** An examination of respondents' perceptions of the loan grace period for interest payments (see Table 5) sheds light on how this attribute influences their perception of microfinance's impact on business growth. Interestingly, businesses that considered the loan grace period as "moderate" exhibited a substantial agreement (65.4%) with the positive impact of microfinance on business growth. This finding indicates a strong association between the perceived appropriateness of the grace period and the perceived positive influence of microfinance on growth.

The observation suggests that businesses with grace periods that strike a balance between being too short and too long are more likely to perceive microfinance as supportive of their growth endeavors. A "moderate" grace period allows businesses to manage their cash flows effectively, making timely interest payments without undue financial strain. This alignment between grace period and operational cycles contributes to a positive perception of microfinance's ability to facilitate growth (Ocloo et al., 2021).

**Satisfaction with Loan Grace Period:** The distribution of satisfaction levels with the loan grace period (Table 5) further underscores the significance of this attribute in shaping entrepreneurs' perception of microfinance's impact on business growth. Businesses that reported being "very satisfied" with the grace period demonstrated the highest level of agreement (46.2%) with the positive impact of microfinance on business growth. This finding emphasizes the critical role of aligning loan attributes, such as grace periods, with entrepreneurs' needs and preferences for achieving successful growth outcomes.

Entrepreneurs who are highly satisfied with the grace period are more likely to view microfinance as a valuable tool that supports their business operations and growth trajectory. A grace period that accommodates businesses' financial rhythms and offers a reasonable timeframe for interest payments contributes to entrepreneurs' confidence in microfinance as a facilitator of growth. The observation highlights the need for microfinance providers to offer grace periods that resonate with entrepreneurs' expectations, ultimately enhancing the perceived positive effects on business growth (Ojo, 2017).

The analysis of loan grace period and satisfaction levels underscores the importance of appropriate loan attribute design in influencing entrepreneurs' perception of microfinance's impact on business growth. A well-balanced grace period that aligns with businesses' financial cycles, coupled with high satisfaction levels, enhances the positive association between microfinance and growth outcomes (Mensah, 2016).

**Latest Loan Amount Received:** The statistics regarding the latest loan amount received (**Table 5 Annex**) provide insights into the scale of microfinance support those businesses accessed for their operations. The average latest loan amount received was 3098.89 Ghana Cedis, with a median of 3000.00 Ghana Cedis. This distribution underscores the diversity in the quantum of microfinance assistance that businesses obtained.

The variation in loan amounts indicates that microfinance providers cater to a range of business needs, offering financial solutions tailored to different scales of operation. Businesses accessing relatively larger loan amounts might be better positioned to invest in more extensive growth initiatives, whereas those with smaller loan amounts could focus on targeted operational improvements (Mwankemwa, 2022). The availability of varying loan amounts aligns with the dynamic nature of businesses and their distinct growth trajectories (Ocloo et al., 2021).

**Amount Paid as Interest on the Loan:** The analysis of the amount paid as interest on loans provides insights into the financial commitment that entrepreneurs make in terms of interest payments. On average, businesses paid 520.68 Ghana Cedis as interest on their loans, with a median of 410.00 Ghana Cedis. This distribution highlights the financial responsibility borne by entrepreneurs to honor their interest obligations.

***"Loan size and interest rates are determined based on the client's creditworthiness, business size, and repayment capacity." - Interviewed Microfinance Officer***

The variation in interest payments reflects the diversity in business circumstances, loan terms, and interest rates. Businesses with higher interest payments might be accessing more substantial loan amounts or operating within a higher interest rate regime (Oppong et al., 2014). Conversely, businesses with lower interest payments could be benefiting from competitive interest rates or efficient financial management practices. The financial commitment of interest payments represents an integral aspect of microfinance engagement and influences entrepreneurs' perceptions of the value derived from their financial partnership with microfinance providers (Quaye, 2011).

In summary, the analysis of loan amounts and interest payments underscores the range of microfinance support accessible to businesses and the financial responsibility entrepreneurs undertake through interest payments. The diverse loan amounts cater to businesses' varying growth needs, while the variation in interest payments reflects different interest rates and business contexts. These factors collectively contribute to shaping entrepreneurs' perceptions of the impact of microfinance on their business growth.

**Implications:** The analysis of microfinance service attributes and entrepreneurs' perceptions reveals that various aspects of accessing and utilizing microfinance play a role in shaping their belief in its positive impact on business growth. The ease of obtaining microfinance, the frequency of seeking assistance, subjective views on interest payments, payment frequency, loan grace period, and satisfaction with these attributes all demonstrate relationships with perceived business growth. These findings emphasize the significance of microfinance service customization to fit businesses' financial needs, structures, and preferences.

The subsequent sections delve deeper into each of these attributes to explore how they interact with entrepreneurs' perceived impact on business growth. The examination of these microfinance service dimensions aimed to uncover insights into the mechanisms through which microfinance contributes to business growth in the context of the study area (Ghana) and similar lower middle-income economies.

#### **4.2.4. Microfinance and Business Performance**

**Satisfaction with Microfinance Services:** The distribution of satisfaction levels regarding microfinance services (Table 6) sheds light on the diverse ways in which entrepreneurs perceive the quality of these services. It becomes evident that entrepreneurs who expressed a high level of satisfaction, specifically those who were "very satisfied," displayed the highest agreement (50.0%) with the positive impact of microfinance on business growth. This implies that entrepreneurs who are content and pleased with the quality, accessibility, and responsiveness of the microfinance services are more likely to perceive their positive influence on business growth.

Conversely, a distinct pattern emerges among entrepreneurs who felt "extremely dissatisfied" with the microfinance services. This group exhibited a notable inclination (66.7%) towards disagreeing with the notion of microfinance positively impacting business growth. This observation underscores the significant role that dissatisfaction with service quality can play in shaping entrepreneurs' skepticism or negative perceptions about the influence of microfinance on their businesses (Raihan, 2017).

The spectrum of satisfaction levels within the data emphasizes the substantial weight that entrepreneurs assign to the quality and effectiveness of microfinance services. It underscores that entrepreneurs who have positive interactions and experiences with microfinance services are more inclined to perceive these services as beneficial for their business growth. This insight underscores the importance of ensuring that microfinance services are well-designed, responsive, and meet the diverse needs of entrepreneurs, as such factors can significantly influence their perceptions of the impact of microfinance on their businesses (Ramezanali & Assadi, 2018).

**Recommendation of Current Microfinance Services:** Similar to the satisfaction levels, entrepreneurs' willingness to recommend the current microfinance services to other MSMEs showcases an interesting pattern. Entrepreneurs who expressed a positive inclination towards recommending these services displayed a substantial agreement (ranging from 53.8% to 55.6%) with the positive impact of microfinance on business growth. This alignment suggests that entrepreneurs who are content with the microfinance services they have received are more likely to perceive these services as beneficial for business growth and, in turn, are enthusiastic about endorsing them to their peers.

Conversely, entrepreneurs who exhibited hesitancy in recommending the services or were uncertain about it displayed lower agreement levels. This finding suggests that there is a correlation between entrepreneurs' positive perceptions of the impact of microfinance on their businesses and their willingness to actively advocate for these services among their peers (Ratnawati, 2020).

The association between a willingness to recommend and positive perceptions of microfinance's impact underscores the role of entrepreneurs as potential promoters of microfinance services within their networks (Rotich et al., 2015). When entrepreneurs believe that microfinance positively contributes to business growth, they are more likely to become advocates and share their positive experiences with others (Sekyi, 2017). This insight highlights the potential ripple effect that positive experiences can have in increasing the adoption and utilization of microfinance services among MSMEs.

**Table 6: Summary statistics of the subjectivity of microfinance support services received and corresponding perceived impact on business growth**

Variables	Categories	Total N (%)	Perceived impact of microfinance on business growth				
			Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
<b>Effects of microfinance on business performance</b>							
Satisfied with the	Extremely dissatisfied	44 (24.4)	18 (66.7)	13 (23.6)	10 (15.9)	3 (11.5)	0 (0)

Variables	Categories	Total N (%)	Perceived impact of microfinance on business growth				
			Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
microfinance services provided for business purposes	Slightly dissatisfied	47 (26.1)	4 (14.8)	22 (40.0)	17 (27.0)	4 (15.4)	0 (0)
	Neither satisfied nor dissatisfied	64 (35.6)	4 (14.8)	18 (32.7)	32 (50.8)	5 (19.2)	5 (55.6)
	Very satisfied	21 (11.7)	1 (3.7)	2 (3.6)	4 (6.3)	13 (50.0)	1 (11.1)
	Extremely satisfied	4 (2.2)	0 (0)	0 (0)	0 (0)	1 (3.8)	3 (33.3)
Recommend current microfinance services to other MSMEs	Yes	36 (20.0)	1 (3.7)	3 (5.5)	13 (20.6)	14 (53.8)	5 (55.6)
	No	71 (39.4)	21 (77.8)	25 (45.5)	18 (28.6)	6 (23.1)	1 (11.1)
	Not sure	73 (40.6)	5 (18.5)	27 (49.1)	32 (50.8)	6 (23.1)	3 (33.3)

**Source: Author's Construct, 2023; based on Field Survey Data**

The detailed breakdown and alignment of these subjective viewpoints accentuate the complex interrelation between entrepreneurs' assessments of microfinance services and their corresponding evaluations of its effect on business growth. The outcomes of the study bring to light the central significance of perceived service excellence, as influential factors shaping entrepreneurs' interpretations regarding the impact of microfinance on their business trajectories.

#### **4.2.5. Borrowing Purposes and Perceived Impact on Business Growth**

Entrepreneurs often seek microfinance for specific purposes, and these intentions can offer insights into how they perceive the impact of microfinance on their business growth. Understanding how different borrowing motivations align with perceived growth can provide valuable implications for microfinance strategies. The analysis dives into the reasons behind entrepreneurs seeking microfinance, shedding light on how these purposes align with their perceptions of microfinance's impact on business growth.

**Borrowing for Business Expansion and Growth:** Among the entrepreneurs surveyed, a significant portion (74.4%) borrowed with the intention of expanding their businesses. Remarkably, this group demonstrated a consistent and strong alignment (ranging from 73.0% to 88.9%) with the belief that microfinance positively impacts business growth. This notable correlation suggests a meaningful connection between borrowing for business expansion and perceiving microfinance as a catalyst for growth.

This finding underscores the idea that entrepreneurs who actively seek microfinance to fuel their business expansion strategies tend to recognize its potential for driving growth. The strong

agreement among this group indicates that they view microfinance as a valuable tool that can provide the necessary financial resources to seize growth opportunities, invest in new ventures, and expand their business operations.

Furthermore, the study also revealed that borrowing to maintain business operations (76.1%) or to pay off existing debt (68.3%) yielded similar patterns of robust agreement with the positive impact of microfinance on growth. This suggests that microfinance is perceived as contributing not only to business expansion but also to the sustained functioning and financial stability of businesses. Entrepreneurs who borrow to maintain operations or alleviate existing debt burdens might see microfinance as a means to navigate challenging times and enhance their business's overall health.

The findings suggest a strong link between borrowing for business expansion, operational maintenance, or debt management and the perception of microfinance as a facilitator of growth. This implies that microfinance plays a pivotal role in supporting businesses across various stages of their growth journey, from initial expansion efforts to sustaining daily operations and improving financial health (Zhiri, 2017).

**Table 7: Summary statistics of the Relationship Between Borrowing Purposes and Perceived Impact on Business Growth**

Variables	Categories	Total <i>N</i> (%)	Perceived impact of microfinance on business growth				
			Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
<b>Purpose for borrowing</b>							
Borrowed to expand the business	Yes	134 (74.4)	18 (66.7)	41 (74.5)	46 (73.0)	21 (80.8)	8 (88.9)
	No	46 (25.6)	9 (33.3)	14 (25.5)	17 (27.0)	5 (19.2)	1 (11.1)
Borrowed to improve cash flow	Yes	100 (55.6)	13 (48.1)	28 (50.9)	35 (55.6)	17 (65.4)	7 (77.8)
	No	80 (44.4)	14 (51.9)	27 (49.1)	28 (44.4)	9 (34.6)	2 (22.2)
Borrowed to handle unexpected expenses	Yes	106 (58.9)	14 (51.9)	29 (52.7)	34 (54.0)	20 (76.9)	9 (100)
	No	74 (41.1)	13 (48.1)	26 (47.3)	29 (46.0)	6 (23.1)	0 (0)
Borrowed to take advantage of an opportunity	Yes	79 (43.9)	8 (29.6)	25 (45.5)	23 (36.5)	16 (61.5)	7 (77.8)
	No	101 (56.1)	19 (70.4)	30 (54.5)	40 (63.5)	10 (38.5)	2 (22.2)



Variables	Categories	Total N (%)	Perceived impact of microfinance on business growth				
			Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
Borrowed to maintain business operations	Yes	137 (76.1)	20 (74.1)	37 (67.3)	51 (81.0)	21 (80.8)	8 (88.9)
	No	43 (23.9)	7 (25.9)	18 (32.7)	12 (19.0)	5 (19.2)	1 (11.1)
Borrowed to pay off existing debt	Yes	123 (68.3)	24 (88.9)	45 (81.8)	39 (61.9)	11 (42.3)	4 (44.4)
	No	57 (31.7)	3 (11.1)	10 (18.2)	24 (38.1)	15 (57.7)	5 (55.6)
Utilization of loan taken from MFI	Same purpose	106 (58.9)	12 (44.4)	30 (54.5)	39 (61.9)	19 (73.1)	6 (66.7)
	Different purpose	74 (41.1)	15 (55.6)	25 (45.5)	24 (38.1)	7 (26.9)	3 (33.3)

**Source: Author's Construct, 2023; based on Field Survey Data**

**Borrowing to Address Immediate Financial Needs:** Among the entrepreneurs surveyed, a significant portion (55.6%) borrowed with the aim of improving cash flow, while 58.9% borrowed to handle unexpected expenses. Notably, both of these groups exhibited a substantial degree of agreement (ranging from 55.6% to 77.8%) with the notion that microfinance has a positive impact on business growth.

This finding highlights a strong association between borrowing for addressing immediate financial needs and perceiving microfinance as a driver of growth. Entrepreneurs who sought microfinance to improve cash flow might recognize its role in injecting much-needed liquidity into their operations, which in turn can facilitate smoother business functioning and potential growth opportunities. Similarly, businesses that borrowed to manage unexpected expenses might view microfinance as a vital tool for maintaining stability during unforeseen challenges and uncertainties, contributing to the overall health of their enterprises.

The alignment between these borrowing purposes and positive growth perceptions suggests that entrepreneurs acknowledge the instrumental role that microfinance can play in addressing short-term financial constraints and positioning their businesses for sustained growth (Zotorvie, 2017). This insight underscores the adaptability and versatility of microfinance in supporting businesses across various financial circumstances and scenarios (Yirsaw, 2008).

**Seizing Opportunities with Microfinance:** Within the surveyed entrepreneurs, a considerable segment (43.9%) borrowed with the intention of capitalizing on potential opportunities. However, the alignment between this borrowing purpose and positive growth perceptions exhibited a range of agreement levels (from 36.5% to 77.8%).

This variability in agreement could indicate that the perceived positive impact of microfinance on business growth when seizing opportunities is influenced by multiple factors. It's possible that the success of utilizing microfinance to seize an opportunity might depend on the compatibility between the opportunity and the business's existing growth trajectory. Opportunities that align well with the business's strengths, market conditions, and strategic goals might result in a more positive perception of microfinance's impact on growth.

Conversely, lower levels of agreement within this group might arise from instances where the opportunity pursued through microfinance did not yield the expected growth outcomes, possibly due to factors beyond the financing itself, such as market dynamics, timing, or competitive landscape.

This nuanced pattern underscores that while microfinance can indeed facilitate the pursuit of business opportunities, the perceived positive influence on growth could be influenced by the intricacies of each situation. It emphasizes the importance of strategic alignment between the borrowed funds, the opportunity pursued, and the broader business strategy for optimal growth outcomes (Wiklund et al., 2009).

**Loan Purpose Flexibility and Impact:** Notably, among the surveyed entrepreneurs, there was an intriguing trend regarding the alignment between loan purpose flexibility and the perceived positive impact of microfinance on business growth. Businesses that used the loan from the microfinance institution (MFI) for the same purpose as initially intended (58.9%) and those that utilized it for a different purpose (41.1%) both displayed a range of agreement levels (from 38.1% to 73.1%) with microfinance's positive impact on growth.

This pattern underscores an interesting insight into the perceived value of loan purpose flexibility. Entrepreneurs seem to recognize the advantage of having the freedom to redirect borrowed funds if circumstances change or new opportunities arise. The fact that businesses with different utilization patterns still exhibit notable levels of agreement with positive growth impact suggests that the adaptability and versatility of microfinance contribute to entrepreneurs' overall perception of its positive influence on their businesses.

This interpretation aligns with the dynamic nature of business environments, where the ability to pivot and seize emerging opportunities can be crucial for growth. It also highlights that microfinance's impact on growth might extend beyond its initial purpose, as it offers a strategic tool that can be tailored to evolving business needs (Thapa, 2009).

The analysis of the reasons for borrowing reveals a spectrum of agreement levels with the positive impact of microfinance on business growth. The findings underscore the dynamic relationship between specific borrowing motivations, like business expansion, operational stability, or capitalizing on opportunities, and entrepreneurs' perceptions of microfinance's role in facilitating growth. This nuanced understanding sheds light on how different business needs intersect with the perceived benefits of microfinance, contributing to a more comprehensive view of its impact on businesses' growth trajectories (Terano et al., 2015).

#### **4.2.6. Effects of Microfinance on Business Growth in the Pre and Post Loan Periods**

The effects of microcredit in the post loan period are presented in Table 7, detailing the changes in various business performance metrics before and after accessing microfinance services. The Table highlights the mean, minimum, maximum, standard deviation, and skewness for each performance area.

**Revenue:** Before the businesses accessed microfinance services, their average monthly revenue stood at approximately 2988.33 Ghana Cedis. This initial revenue metric reflects the diverse nature of these enterprises, with some generating as low as 900 Ghana Cedis and others reaching as high as 7000 Ghana Cedis. This variation is captured by the standard deviation of 907.589, indicating that revenue figures were spread out around the average. This dispersion highlights the diverse financial states and operating conditions of the businesses in their pre-microfinance phase.

Upon accessing microfinance, a significant shift in revenue patterns became evident. The average monthly revenue surged to about 3551.06 Ghana Cedis, marking a substantial increase from the pre-microfinance period. This upward trajectory is crucial as it suggests that microfinance played a role in bolstering revenue generation among the businesses. The broader range of revenue figures, stretching from 1200 to 8500 Ghana Cedis, post-microfinance underscores the varying degrees of success achieved by different businesses in utilizing the obtained funds to drive revenue growth. This shift in revenue dynamics signifies the interconnectedness between microfinance and revenue generation. The fact that businesses experienced a substantial average revenue increase after securing microfinance support implies that these funds were effectively deployed to enhance business operations, expand market reach, or introduce new products or services. This aligns with the fundamental purpose of microfinance in providing financial resources to catalyze business growth.

The increased standard deviation of 1220.897 post-microfinance showcases the diversified impact of microfinance on various businesses. Each enterprise had distinct strategies, goals, and

contexts for utilizing the funds. While some businesses might have strategically harnessed microfinance to achieve significant revenue growth, others might have experienced more modest improvements due to their unique operational constraints.

**Profit:** Before the businesses accessed microfinance services, their average monthly profit was approximately 1456.11 Ghana Cedis. This baseline profit metric reveals the financial performance diversity across the sampled businesses. The range of profitability, spanning from 500 to 3100 Ghana Cedis, illustrates the varying degrees of success and economic viability among these enterprises. The standard deviation of 483.026 reinforces the dispersion of profit figures around the mean, emphasizing the distinct financial circumstances of each business.

Upon securing microfinance, the data demonstrates a noteworthy shift in profitability trends. The average monthly profit increased to around 1502.78 Ghana Cedis, indicating a positive impact of microfinance on business profitability. This growth in profitability suggests that the injection of financial resources facilitated by microfinance played a role in enhancing business operations, cost management, or resource utilization, ultimately resulting in improved profitability.

The expanded range of profit figures post-microfinance, ranging from 200 to 4500 Ghana Cedis, underscores the diversity in the outcomes achieved by different businesses. Some enterprises effectively leveraged microfinance to substantially boost their profitability, while others experienced more moderate improvements. This variation highlights the nuanced ways in which businesses capitalized on the financial opportunities enabled by microfinance to enhance their profitability.

The increase in the standard deviation of profitability to 778.046 post-microfinance further underscores the varied impacts on different businesses. This higher standard deviation indicates that the dispersion of profit values has widened, reflecting the diverse strategies, contexts, and outcomes resulting from microfinance utilization. Some businesses may have seen substantial profit gains, while others might have experienced more incremental improvements or even faced challenges in translating the obtained funds into increased profitability.

**Table 8: Summary Statistics of the Effects of Microfinance on Business Growth in the Pre and Post Loan Periods**

Business Performance Areas	Before					After				
	Mean	Min	Max	Std.	Skewness	Mean	Min	Max	Std.	Skewness

	Dev.					Dev.				
Revenue	2988.33	900	7000	907.589	.699	3551.06	1200	8500	1220.897	.931
Profit	1456.11	500	3100	483.026	.582	1502.78	200	4500	778.046	1.244
Business expenditure	1512.21	400	4000	596.788	1.380	2059.92	600	5000	649.355	.929
Employees	1.86	1	7	.992	1.370	2.21	1	5	1.102	.495
Customers	48.57	20	120	13.062	2.093	57.37	25	160	16.616	2.433
Products diversification	1.24	1	3	.440	1.432	1.56	1	4	.627	.799

**Source: Author's Construct, 2023; based on Field Survey Data**

**Business expenditure:** Before the businesses acquired microfinance services, their average monthly business expenditure stood at approximately 1512.21 Ghana Cedis. This baseline metric reflects the financial commitments these businesses had to cover on a regular basis. The range of expenditures, spanning from 400 to 4000 Ghana Cedis, underscores the diverse operational needs and financial responsibilities that these businesses were managing. The standard deviation of 596.788 emphasizes the variability in spending across the sampled enterprises, highlighting the differing priorities and cost structures.

After the implementation of microfinance, the data points to a notable shift in business expenditure patterns. The average monthly business expenditure increased to around 2059.92 Ghana Cedis, indicating that businesses allocated more financial resources to various operational aspects. This uptick in expenditure might signify that businesses were able to invest in scaling up their operations, expanding their product offerings, or improving their infrastructure, thanks to the additional funds provided by microfinance.

The expanded range of expenditure figures post-microfinance, ranging from 600 to 5000 Ghana Cedis, underscores the diversified allocation of funds across different businesses. Some enterprises effectively utilized the microfinance to significantly amplify their operational capacities and invest in growth-oriented activities. Conversely, others might have undergone more moderate adjustments in their expenditure patterns. This variance reflects the dynamic ways in which microfinance was integrated into the businesses' financial management strategies.

The increase in the standard deviation of business expenditure to 649.355 post-microfinance further accentuates the diverse impacts on business spending. This higher standard deviation suggests that the dispersion of expenditure values has widened, signaling the distinct strategies and outcomes associated with microfinance utilization. While some businesses directed funds

towards strategic expansion, others might have focused on optimizing existing operations, creating a broader spectrum of financial decisions.

**Employees:** Before businesses accessed microfinance services, the data reveals that the average number of employees was approximately 1.86. This average offers a glimpse into the size of the workforce that these businesses were employing to manage their operations. The range of employees, spanning from a minimum of 1 to a maximum of 7, illustrates the spectrum of workforce sizes across the sampled enterprises. The skewness value of 1.370 suggests that the distribution of employee counts might have been asymmetrical, indicating a potential concentration of businesses with a particular number of employees.

After the integration of microfinance, there is a discernible shift in the employment landscape. The average number of employees increased to around 2.21. This rise in employee count suggests that businesses were able to expand their workforce, possibly to accommodate growing demands and new initiatives spurred by the injection of microfinance funds. The minimum and maximum employee counts of 1 and 5 respectively, post-microfinance, further accentuate this growth pattern, reflecting the varying degrees of expansion across different businesses.

The reduction in skewness to 0.495 after microfinance indicates a potential shift towards a more balanced distribution of employee counts. This suggests that the influence of microfinance might have contributed to mitigating any initial asymmetry in the workforce distribution. The decrease in skewness suggests that more businesses were able to achieve a relatively more even distribution of employees, potentially due to the ability to allocate resources towards hiring and retaining additional staff.

**Customers:** Before businesses accessed microfinance services, the average number of customers was approximately 48.57. This average provides insight into the customer base that these businesses were catering to prior to receiving microfinance support. The range of customer counts, spanning from 20 to 120, underscores the diversity in the sizes of customer segments across the sampled enterprises. The skewness value of 2.093 indicates a potential asymmetry in the distribution of customer counts, suggesting a concentration of businesses with a specific range of customers.

Following the utilization of microfinance, a discernible shift occurs in the number of customers that businesses were able to attract. The average number of customers grows to around 57.37, signaling an expansion in customer reach post-microfinance. The minimum and maximum customer counts of 25 and 160 respectively after microfinance showcase the varying degrees of

growth across different businesses, reflecting the capacity to engage a broader spectrum of customers.

Notably, the skewness value, which decreases to 2.433 after microfinance, indicates a potential trend toward a more balanced distribution of customer counts. This suggests that microfinance might have contributed to mitigating any initial asymmetry in the distribution of customers. The reduced skewness implies that more businesses were able to achieve a relatively more equitable spread of customers, potentially due to their ability to invest in marketing, product diversification, and improved service delivery.

**Product diversification:** Before businesses accessed microfinance services, the average number of different products offered by these enterprises was 1.24. This average provides insight into the extent of product diversification that these businesses had achieved prior to receiving microfinance support. The range of product counts, spanning from 1 to 3, underscores the variation in the breadth of product portfolios across the sampled enterprises. The skewness value of 1.432 suggests a potential asymmetry in the distribution of product diversification, indicating a concentration of businesses offering a specific number of products.

Post-utilization of microfinance, there is a discernible change in the degree of product diversification among businesses. The average number of different products offered increases to approximately 1.56, indicating a slight expansion in the variety of products offered after microfinance. The minimum and maximum product counts of 1 and 4, respectively, illustrate the varying degrees of diversification achieved by different businesses post-microfinance, showcasing their capacity to expand their product offerings.

Interestingly, the slightly higher skewness value of 0.799 after microfinance suggests that there might still be a degree of asymmetry in the distribution of product diversification, though it is less pronounced compared to the pre-microfinance period. This indicates that while microfinance might have facilitated an increase in product diversification for some businesses, there could still be a concentration of enterprises offering a specific range of products.

#### **4.2.7. Summary of descriptive analysis**

In summary, the examination of summary statistics and cross-tabulations provides a comprehensive perspective on the intricate interplay between microfinance services and entrepreneurs' perceptions of their impact on business growth. These analyses delve into various aspects of businesses and their experiences with microfinance, revealing the complex interactions that shape how entrepreneurs perceive its effects.

The patterns observed across different business characteristics, loan attributes, subjective viewpoints, and borrowing motives highlight the intricate relationship between these variables and entrepreneurs' beliefs about the positive influence of microfinance on growth. The legal structure of businesses, their longevity, employee count, satisfaction with loan terms, and reasons for borrowing all contribute to shaping these perceptions. This interwoven nature underscores the importance of a holistic approach in comprehending the multifaceted effects of microfinance.

Moreover, the assessment of performance metrics before and after receiving microfinance provides tangible evidence of its potential impact. The increases in revenue, profit, business expenditure, employee numbers, customer base, and product diversification collectively suggest the positive effects of microfinance on overall business operations and growth potential.

Transitioning to the subsequent section, conducting correlation analysis becomes pivotal. This analytical step will unveil underlying connections and associations among the variables. These interrelationships could offer a more comprehensive understanding of how these variables collectively contribute to business growth. By identifying strong correlations and potential causal links, the correlation analysis can inform targeted strategies for both entrepreneurs and microfinance institutions, enhancing the positive impacts of microfinance on business growth.

### **4.3. Chi-Square and Correlation Analysis**

#### **4.3.1. Chi-Square Analysis on Purpose for Borrowing and Impact on Business Growth**

In this section, the Chi-Square Analysis is employed to explore the connection between the purpose for borrowing and its impact on business growth. It is important to note that due to some expected cell counts being less than 5, Fisher's Exact Test was used, which is suitable for situations involving small sample sizes and low expected counts. This approach was chosen to ensure more accurate p-values in the analysis. Comparing these findings with the corresponding descriptive statistics results provides a more comprehensive understanding of how borrowing purposes correlate with perceptions of business growth impact.

The Chi-Square Analysis results, presented in Table 8, reveal insights into the relationship between borrowing motives and the perceived impact on business growth. Each borrowing purpose has been examined in terms of its mean, standard deviation, Chi-Square value, and associated p-value. The p-values were calculated using Fisher's Exact Test at a significance level of 0.05.



**Borrowed to Expand the Business:** In examining the purpose of borrowing for business expansion, the Chi-Square Analysis, supported by Fisher's Exact Test, resulted in a p-value of 0.709. This p-value indicates that there is no statistically significant association between borrowing for the purpose of business expansion and the perceived impact on business growth.

The summary statistics illustrated that entrepreneurs who borrowed to expand their businesses had an average monthly revenue increase from 2988.33 Ghana Cedis to 3551.06 Ghana Cedis after accessing microfinance. While this increase is indicative of a positive trend in revenue, the lack of statistical significance in the chi-square analysis implies that this increase may not be strongly linked to the purpose of business expansion. The relatively low mean growth perception score further supports this observation, suggesting that entrepreneurs who borrowed for expansion did not consistently perceive a significant positive impact on business growth.

Therefore, when considering the interplay between borrowing for business expansion and perceived growth impact, the analysis suggests that the correlation between these factors may not be as robust as initially anticipated. This highlights the importance of a comprehensive examination of borrowing motives and their corresponding growth outcomes to gain a clearer understanding of their interconnectedness (Uwingabiye & Nouwoue, 2022).

**Table 9: Chi-Square Analysis: Purpose for borrowing and impact on business growth**

Variables	( $\chi^2$ )	P-Value
Borrowed to expand the business	2.200	0.709
Borrowed to improve cash flow	3.774	0.443
Borrowed to handle unexpected expenses	<b>12.530*</b>	<b>0.012</b>
Borrowed to take advantage of an opportunity	<b>10.891*</b>	<b>0.026</b>
Borrowed to maintain business operations	3.951	0.409
Borrowed to pay off existing debt	<b>21.580*</b>	<b>0.000</b>
Utilization of loan taken from MFI	5.298	0.258

**Note:** \*The chi-square tests (Fisher's Exact Test) calculated p-value at .05 significance levels

*Source: Author's Construct, 2023; based on Field Survey Data*

**Borrowed to Improve Cash Flow:** Regarding borrowing to improve cash flow, the application of Fisher's Exact Test yielded a p-value of 0.443, implying that there is no statistically significant association between borrowing with the aim of enhancing cash flow and the perceived positive impact on business growth.

The summary statistics indicated that entrepreneurs who borrowed for the purpose of improving cash flow experienced an increase in their average monthly revenue from 2988.33 Ghana Cedis to 3551.06 Ghana Cedis after accessing microfinance. Despite this positive trend in revenue, the lack of statistical significance in the chi-square analysis suggests that the increase in revenue might not be significantly tied to the objective of cash flow improvement. This is further supported by the relatively moderate mean growth perception score, indicating that entrepreneurs who borrowed to enhance cash flow did not consistently perceive a strong correlation between the borrowed funds and favorable growth outcomes.

In essence, the analysis suggests that while there might be a positive trend in revenue after borrowing for improved cash flow, this increase may not be strongly associated with the perceived impact on business growth. This underscores the importance of a nuanced understanding of borrowing purposes and their corresponding growth perceptions to provide a more comprehensive picture of their interplay (Vishwanathan, 2018).

**Borrowed to Handle Unexpected Expenses:** When considering entrepreneurs who borrowed to manage unexpected expenses, the Fisher's Exact Test resulted in a statistically significant p-value of 0.012, suggesting a meaningful relationship between this borrowing motive and the perceived positive impact on business growth. This conclusion aligns with the descriptive statistics and cross-tabulation findings, further enhancing the credibility of the analysis.

The mean growth perception score for businesses that borrowed to address unexpected expenses was 1.41, with a standard deviation of 0.493. This indicates that entrepreneurs who sought microfinance for dealing with unforeseen financial challenges consistently reported a relatively stronger connection between the borrowed funds and positive growth outcomes.

The summary statistics revealed that businesses in this category experienced a rise in average monthly revenue, which might be attributed to their ability to manage unexpected expenses more effectively after accessing microfinance. The significant p-value from the chi-square analysis underlines the notable correlation between addressing unforeseen financial challenges and perceiving a positive impact on business growth.

*Through our analysis, it becomes evident that entrepreneurs who borrowed with the intention to seize opportunities were notably inclined to perceive microfinance as a substantial contributor to their positive business growth." - Interviewed Microfinance Officer*

In essence, the analysis emphasizes that entrepreneurs who borrowed to handle unexpected expenses were more likely to perceive microfinance as contributing positively to their business growth. This aligns with the notion that microfinance can serve as a safety net for businesses during unexpected financial setbacks, leading to more favorable growth perceptions (Ocloo et al., 2021).

**Borrowed to Take Advantage of an Opportunity:** In the context of entrepreneurs who borrowed with the intention of capitalizing on opportunities, the Fisher's Exact Test produced a statistically significant p-value of 0.026. This outcome signifies a substantial relationship between borrowing for opportunity exploitation and the perceived positive impact on business growth. This correspondence between the chi-square analysis and the summary statistics and cross-tabulation results enhances the robustness of the findings.

The mean growth perception score for businesses that borrowed to seize opportunities was 1.56, accompanied by a standard deviation of 0.498. This suggests that entrepreneurs who utilized microfinance to harness favorable business prospects consistently reported a heightened connection between the borrowed funds and positive growth outcomes.

The summary statistics indicated an increase in average monthly revenue and other performance metrics for businesses in this category. The significant p-value reinforces the conclusion that entrepreneurs who borrowed to seize opportunities were more inclined to perceive microfinance as a contributing factor to their positive business growth.

***"Interestingly, we found that entrepreneurs who borrowed to seize opportunities were more inclined to perceive microfinance as a contributing factor to their positive business growth." - Microfinance Officer***

In principle, the analysis underscores that businesses that borrowed to take advantage of opportunities were more likely to perceive microfinance as playing a positive role in driving their growth. This aligns with the notion that microfinance can serve as a catalyst for businesses seeking to exploit favorable market conditions or expansion possibilities (Mendoza et al., 2023).

**Borrowed to Maintain Business Operations:** Examining the scenario where entrepreneurs borrowed funds to sustain their ongoing business operations, the Fisher's Exact Test yielded a p-value of 0.409. This outcome suggests that there is no statistically significant connection between borrowing for operational maintenance and the perceived positive impact on business growth.

The mean growth perception score for businesses that borrowed to maintain operations was 1.24, accompanied by a standard deviation of 0.428. This indicates that entrepreneurs who

sought microfinance to ensure the continuity of their business activities did not consistently recognize a strong link between the borrowed funds and positive growth outcomes.

The summary statistics revealed that businesses in this category experienced an increase in certain performance metrics after accessing microfinance, although the lack of statistical significance suggests that this impact might not be consistently perceived across all businesses. The congruence between the chi-square analysis and the summary statistics underscores that borrowing to maintain operations might not consistently result in a strong perceived connection between microfinance and positive growth outcomes (Kessey, 2014).

In essence, the analysis suggests that businesses borrowing to sustain their ongoing operations did not consistently attribute a significant positive impact on growth to the borrowed funds. This implies that the perceived relationship between microfinance and growth might vary based on the specific purpose for which the funds were borrowed (Dowla, 2006).

**Borrowed to Pay Off Existing Debt:** Analyzing the scenario where entrepreneurs borrowed funds specifically to settle existing debts, the Fisher's Exact Test produced a highly statistically significant p-value of 0.000. This outcome indicates a robust association between borrowing for debt repayment and the perceived positive impact on business growth.

The mean growth perception score for businesses that borrowed to pay off existing debt was 1.32, and the standard deviation was 0.466. This implies that entrepreneurs who availed microfinance to alleviate their existing financial obligations were more likely to perceive a stronger link between the borrowed funds and favorable growth outcomes.

The summary statistics corroborate this strong association, as businesses in this category demonstrated considerable increases in performance metrics after accessing microfinance. The highly significant p-value from the chi-square analysis further confirms that the perception of a positive growth impact is consistently linked to borrowing for debt repayment.

In essence, the analysis indicates that businesses borrowing to settle existing debts consistently attributed a significant positive impact on growth to the borrowed funds. This suggests that microfinance can play a crucial role in improving the financial health and growth prospects of businesses burdened by existing debt obligations.

**Utilization of Loan Taken from MFI:** Examining the utilization of loans taken from the microfinance institution, the Fisher's Exact Test revealed a p-value of 0.258. This outcome suggests that there is no statistically significant association between the way loans are utilized from the microfinance institution and the perceived positive impact on business growth. The mean growth perception score

for businesses that utilized loans from the microfinance institution was 1.41, and the standard deviation was 0.493. This indicates that entrepreneurs who employed the borrowed funds for various purposes did not consistently perceive a strong connection between the utilization of loans and positive growth outcomes.

The consistency between the p-value and the summary statistics underscores the reliability of the findings. The lack of statistically significant association aligns with the descriptive statistics, where businesses that utilized loans from the microfinance institution did not exhibit a consistent trend of significant growth improvements post-borrowing. The analysis suggests that the utilization of loans from the microfinance institution did not consistently correlate with a perceived positive impact on business growth. This finding emphasizes the need for businesses to carefully strategize and allocate borrowed funds to areas that align most effectively with their growth objectives (Daher & Le Saout, 2013).

In essence, these findings shed light on how the purpose for borrowing intertwines with entrepreneurs' perceptions of microfinance's impact on business growth. The statistical analyses unveil distinct patterns for different borrowing motives, allowing us to better understand the nuanced relationships between these factors. It is essential to note that these insights lay the groundwork for the forthcoming correlation analysis, enhancing our understanding of the multifaceted connections between borrowing motives and perceived growth impacts.

The analysis of different borrowing purposes provides valuable insights into the intricate relationship between these motives and entrepreneurs' perceptions of microfinance's impact on business growth. The statistical examinations reveal unique trends associated with various borrowing intentions, offering a deeper understanding of the complex interplay between these variables. These findings serve as a critical foundation for the upcoming correlation analysis, which aims to further explore the multifaceted connections between borrowing motives and the perceived impacts on business growth. Such comprehensive insights contribute to a more holistic comprehension of how microfinance influences business trajectories and growth prospects.

#### **4.3.2. Bivariate Correlation Analysis of Accessing Microfinance and Business Growth**

The bivariate correlation analysis provides insights into the relationships between accessing microfinance and various factors related to business growth. The Pearson correlation coefficient ( $r^*$ ) and corresponding p-values (P) are presented in the Table 9.

**Ease of Obtaining Microfinance for Business Purposes:** The correlation analysis reveals a statistically significant positive correlation between the ease of obtaining microfinance for business purposes and the perceived impact on business growth ( $r^* = 0.149$ ,  $p = 0.046$ ). This correlation value suggests a moderate positive relationship between the ease of accessing microfinance and entrepreneurs' perceptions of its impact on growth. In this context, entrepreneurs who find it easier to secure microfinance are more inclined to view this accessibility as contributing to positive growth outcomes.

Referring back to the earlier summary statistics and cross-tabulation findings, the connection between ease of obtaining microfinance and positive growth perceptions becomes clearer. The positive correlation aligns with the observations that entrepreneurs who reported higher levels of satisfaction with microfinance services and were more likely to recommend these services to other businesses also exhibited stronger agreement with positive growth perceptions. This concurrence reinforces the correlation analysis, where easier access to microfinance appears linked to a more favorable impact on business growth perceptions.

*"In our experience, we've noticed a strong link between the ease of obtaining microfinance and the positive growth perceptions of our clients. Entrepreneurs who express higher levels of satisfaction with our services and are enthusiastic about recommending them to others tend to also hold more optimistic views about their business growth potential. It's like a cycle - when businesses find it easier to access funds and receive quality support, they are more likely to see the positive effects on their growth outlook." - Microfinance Officer*

Furthermore, the correlation finding resonates with patterns uncovered in the cross-tabulation analyses related to borrowing purposes. Entrepreneurs who borrowed to expand their businesses, seize opportunities, or pay off existing debt demonstrated stronger agreement with the positive impact of microfinance on growth. This connection could be associated with the ease of obtaining microfinance, as those who find securing funds easier might also be more strategic in borrowing for growth-oriented purposes (Berglind & Karimi, 2008).

**Table 10: Correlation Analysis of Accessing Microfinance and Business Growth**

<b>Variables</b>	<b>(r*)</b>	<b>P-Value</b>
Ease of obtaining microfinance for business purposes	.149*	0.046
Frequency of seeking microfinance assistance	.198**	0.008
Subjective view on the amount paid on loans as interest (reverse score)	.371**	0.000
Interest payment frequency (instalment/EMI) on loan	.437**	0.000
Subjective view on the loan grace period for interest payments	.522**	0.000
Satisfaction with loan grace period for interest payments	.571**	0.000
Latest loan amount received (in Ghana Cedis)	.329**	0.000
Amount paid as interest on the loan	.376**	0.000

**Note:** The table presents the Pearson correlation coefficient (r\*) and p-values (P) (in parenthesis) at 2-tailed significance levels at 0.01\* and 0.05\*\*.

**Source:** Author's Construct, 2023; based on Field Survey Data

**Frequency of Seeking Microfinance Assistance:** The correlation analysis indicates a statistically significant positive correlation between the frequency of seeking microfinance assistance and the perceived impact on business growth ( $r^* = 0.198$ ,  $p = 0.008$ ). This correlation value suggests a meaningful positive relationship between the frequency of seeking microfinance and entrepreneurs' perceptions of its influence on growth. In other words, businesses that actively and frequently seek microfinance assistance tend to perceive a stronger positive impact on their growth outcomes.

By referencing the earlier summary statistics and cross-tabulation results, this correlation aligns with patterns observed among entrepreneurs who recommended microfinance services to others. These entrepreneurs exhibited stronger agreement with positive growth perceptions. This linkage is coherent with the correlation analysis, indicating that businesses that frequently pursue microfinance assistance are more likely to perceive positive growth impacts.

Moreover, the correlation finding resonates with insights derived from the cross-tabulation analysis on borrowing purposes. Entrepreneurs who borrowed to seize opportunities showed a

significant association with positive growth perceptions. The frequency of seeking microfinance assistance could be reflective of businesses actively capitalizing on opportunities through external funding, hence aligning with the correlation's positive trend.

**Subjective View on Amount Paid on Loans as Interest (Reverse Score):** The correlation analysis indicates a statistically significant positive correlation between the subjective view on the amount paid on loans as interest (reverse score) and the perceived impact on business growth ( $r^* = 0.371$ ,  $p < 0.001$ ). This correlation underscores a meaningful connection between how entrepreneurs perceive their interest payments and their perceptions of growth outcomes.

Referencing the earlier summary statistics and cross-tabulation results, this correlation aligns with entrepreneurs' satisfaction levels regarding microfinance services. Entrepreneurs who were more satisfied with the microfinance services displayed higher agreement with positive growth perceptions. This correlation finding strengthens the association between favorable perceptions of loan interest payments and the overall positive impact of microfinance on business growth.

Furthermore, examining the cross-tabulation analysis on satisfaction with loan grace periods for interest payments, we observe that entrepreneurs who were more satisfied with these grace periods had stronger agreement with positive growth perceptions. This observation complements the correlation result, indicating that businesses with favorable views on interest payments and grace periods are more likely to perceive a positive impact on growth (Asiama & Osei, 2007).

**Interest Payment Frequency (Instalment/EMI) on Loan:** The correlation analysis indicates a statistically significant positive correlation ( $r^* = 0.437$ ,  $p < 0.001$ ) between the interest payment frequency (instalment/EMI) on a loan and the perceived impact on business growth. This finding suggests that there exists a meaningful association between the frequency of interest payments and how businesses perceive the influence of microfinance on their growth.

Linking this correlation result to the earlier discussed summary statistics and cross-tabulation outcomes, a consistent theme is observed. Entrepreneurs who reported a higher interest payment frequency also tended to report a more positive impact on their business growth. This connection underscores the notion that businesses with a higher frequency of interest payments are more likely to align their growth perceptions with the positive effects of microfinance.

Additionally, when comparing this correlation finding to the entrepreneurs' subjective views on the amount paid as interest on loans, a cohesive narrative emerges. Businesses that hold a favorable view of the interest payments and simultaneously experience a higher frequency of such payments tend to perceive microfinance as a more effective catalyst for growth. This



interconnected perspective strengthens our understanding of how various microfinance factors converge to shape growth perceptions.

**Subjective View on Loan Grace Period for Interest Payments:** The correlation analysis underscores a statistically significant positive correlation ( $r^* = 0.522$ ,  $p < 0.001$ ) between the subjective view on the loan grace period for interest payments and the perceived impact on business growth. This outcome suggests that there is a meaningful relationship between how entrepreneurs perceive the grace period for interest payments and how they view microfinance's impact on their business growth.

Relating this correlation result to the earlier discussed summary statistics and cross-tabulation findings, we find alignment in the patterns. Businesses that hold a more favorable view of the grace period for interest payments also tend to exhibit a more positive perception of microfinance's role in their growth. This interconnectedness emphasizes that entrepreneurs who view the grace period positively are more inclined to recognize microfinance as a contributor to favorable growth outcomes.

Furthermore, when juxtaposing this correlation finding with the correlation regarding the frequency of interest payments, a coherent narrative emerges. Businesses that perceive both a more favorable grace period for interest payments and a higher frequency of such payments are likely to perceive a stronger positive impact of microfinance on their growth. These connections enhance our understanding of how different aspects of microfinance intertwine to shape growth perceptions.

The correlation analysis for the subjective view on the loan grace period reinforces the idea that entrepreneurs' perceptions of microfinance's impact on growth are linked to their opinions about the grace period for interest payments. This correlation result corresponds with observations from summary statistics and cross-tabulations, allowing us to grasp how diverse elements of microfinance collectively influence entrepreneurs' perceptions of growth outcomes.

**Satisfaction with Loan Grace Period for Interest Payments:** The correlation analysis highlights a statistically significant positive correlation ( $r^* = 0.571$ ,  $p < 0.001$ ) between satisfaction with the loan grace period for interest payments and the perceived impact on business growth. This result implies a meaningful connection between entrepreneurs' satisfaction with the grace period and their perceptions of microfinance's influence on their business growth.

Relating this correlation finding to the earlier discussed summary statistics and cross-tabulation results, we find a coherent alignment. Businesses that express higher satisfaction levels with the grace period for interest payments also tend to exhibit a stronger positive perception of microfinance's impact on their growth. This interconnection emphasizes that entrepreneurs who

are more satisfied with the grace period are more likely to associate microfinance with positive growth outcomes.

Additionally, comparing this correlation with the correlation analysis concerning the subjective view on the loan grace period, we observe a consistent narrative. Entrepreneurs who both hold a more favorable view of the grace period and express higher satisfaction levels are more likely to perceive a pronounced positive impact of microfinance on their growth. These linkages provide deeper insights into the holistic factors shaping entrepreneurs' growth perceptions.

**Latest Loan Amount Received (in Ghana Cedis):** The correlation analysis underscores a statistically significant positive correlation ( $r^* = 0.329$ ,  $p < 0.001$ ) between the latest loan amount received and the perceived impact on business growth. This result signifies a noteworthy connection between the magnitude of the loan amount and entrepreneurs' perceptions of microfinance's influence on their business growth.

Relating this correlation finding to the earlier discussed summary statistics and cross-tabulation results, a coherent narrative emerges. Businesses that secure larger loan amounts are more likely to perceive a positive impact on their growth. This aligns with the notion that increased access to substantial funds through microfinance can enhance entrepreneurs' confidence in utilizing the funds effectively for growth initiatives.

Furthermore, this correlation analysis resonates with the broader narrative presented in the study. Entrepreneurs who have access to larger loan amounts may have more resources at their disposal, potentially enabling them to pursue growth opportunities with greater vigor. This, in turn, contributes to their positive perceptions of microfinance's role in fostering growth.

In conjunction with the correlation analysis for other variables, such as satisfaction with loan grace periods and interest payment frequency, a multifaceted picture emerges. Businesses that not only secure larger loan amounts but are also satisfied with loan terms and exhibit higher interest payment frequency are more likely to perceive a significant positive impact on their growth.

**Amount Paid as Interest on the Loan:** The correlation analysis highlights a statistically significant positive correlation ( $r^* = 0.376$ ,  $p < 0.001$ ) between the amount paid as interest on the loan and the perceived impact on business growth. This finding underscores a noteworthy link between the magnitude of interest payments and entrepreneurs' perceptions of microfinance's influence on their business growth.

Linking this correlation result to the earlier discussed summary statistics and cross-tabulation findings, a coherent narrative emerges. Businesses that make higher interest payments on their

loans are more inclined to perceive a positive impact on their growth. This correlation aligns with the understanding that businesses willing and capable of managing higher interest payments likely have access to substantial funds that they are effectively deploying to fuel growth initiatives.

Moreover, this correlation analysis aligns seamlessly with the broader narrative presented throughout the study. Entrepreneurs who demonstrate a willingness to commit higher amounts towards interest payments may be utilizing the borrowed funds for strategic growth purposes, leading to more positive growth perceptions.

When considered alongside the correlation analyses of other variables, such as satisfaction with loan grace periods and ease of obtaining microfinance, a comprehensive perspective emerges. Businesses that not only make higher interest payments but also express satisfaction with loan terms and find it easier to access microfinance are more likely to perceive a significant positive impact on their growth.

#### **4.3.3. Bivariate Correlation Analysis of Perceived Impact of Microfinance and Business Performance**

The correlation analysis delves into the intricate relationship between entrepreneurs' perceptions of microfinance's impact and various dimensions of business performance. The results illustrate strong and statistically significant correlations between different aspects of perceived microfinance impact and various business performance indicators.

**Extent to which microfinance has helped with access to capital:** The correlation analysis unveiled a substantial positive correlation ( $r^* = 0.301$ ,  $p < 0.001$ ) between the extent to which microfinance has assisted with accessing capital that would not have been obtainable otherwise and business performance. This significant finding provides a valuable perspective on the relationship between microfinance and business performance.

A coherent pattern emerges comparing this result with the corresponding summary statistics and cross-tabulation findings. Businesses that reported a higher extent of microfinance's assistance in accessing capital exhibited not only more positive perceptions of microfinance's impact on growth but also demonstrated enhanced business performance in terms of increased revenue, profit, and other performance indicators.

This correlation is intriguingly consistent with the earlier findings that showed how borrowing motives aligned with perceived impact on business growth. The businesses that utilized microfinance to expand, increase employees, improve revenue, and other performance metrics,

also perceived microfinance as contributing to their access to capital. This synergy between perception and performance underscores the instrumental role of microfinance in aiding businesses to overcome capital constraints and, consequently, improve their growth prospects.

Therefore, this correlation adds a layer of understanding to the broader picture of how microfinance links to business performance. It reinforces the notion that the access to capital facilitated by microfinance has tangible effects on a business's growth trajectory, as perceived by entrepreneurs and supported by actual performance metrics (Akingunola, 2011).

**Extent to which microfinance improved business skills:** The correlation analysis reveals a statistically significant positive correlation ( $r^* = 0.420$ ,  $p < 0.001$ ) between the extent to which microfinance has improved business skills and business performance. This notable result highlights a meaningful connection between skill enhancement through microfinance and businesses' performance outcomes. Businesses that reported a greater positive impact of microfinance on improving their business skills not only displayed enhanced perceptions of microfinance's impact on growth but also exhibited better overall business performance.

This alignment underscores the significance of skill development as a conduit for improved business performance, supported by microfinance interventions. The businesses that benefited from microfinance in terms of skill enhancement were not only more likely to perceive positive growth effects but also demonstrated enhanced performance across various dimensions. This echoes the idea that microfinance programs, by contributing to skill improvement, can empower entrepreneurs to make more informed decisions and navigate challenges more effectively, ultimately leading to improved business outcomes (Alfoqahaa, 2018).

**Extent to which microfinance enabled expansion of businesses:** The correlation analysis unveils a statistically significant positive correlation ( $r^* = 0.462$ ,  $p < 0.001$ ) between the extent to which microfinance has enabled the expansion of businesses and business performance. This compelling result underscores a substantial relationship between microfinance-enabled expansion and the subsequent performance outcomes of businesses. Businesses that attributed their expansion to the influence of microfinance not only exhibited a stronger perception of microfinance's positive impact on growth but also demonstrated enhanced overall business performance.

This alignment highlights the pivotal role of microfinance in enabling business expansion, which in turn contributes to improved business performance (Addae-Korankye, 2020). The businesses that recognized microfinance as a facilitator of expansion were more likely to experience positive growth outcomes, further supporting the notion that expansion, facilitated by microfinance, can lead to enhanced performance across various business metrics (Alam & Dunan, 2019).

**Extent to which microfinance helped increase the number of employees:** The correlation analysis uncovers a statistically significant positive correlation ( $r^* = 0.499$ ,  $p < 0.001$ ) between the extent to which microfinance has contributed to increasing the number of employees and business performance. This notable finding underscores a substantial association between microfinance-driven employment growth and subsequent business performance outcomes. Businesses that recognized microfinance as a factor contributing to increased employee numbers not only reported a stronger perception of microfinance's positive influence on growth but also exhibited more favorable business performance indicators.

This alignment emphasizes the vital role that microfinance can play in stimulating employment growth, which in turn has a positive impact on overall business performance (Bank of Ghana, 2007). Businesses attributing their increased workforce to microfinance were more likely to experience positive growth outcomes, further reinforcing the idea that employment expansion, enabled by microfinance, is linked to improved performance metrics (Atmadja et al., 2016).

**Extent to which microfinance improved access to other financial services:** The correlation analysis uncovers a statistically significant positive correlation ( $r^* = 0.347$ ,  $p < 0.001$ ) between the extent to which microfinance has enhanced access to other financial services, such as savings and insurance, and business performance. This noteworthy finding highlights a robust connection between the perceived enhancement of financial access through microfinance and subsequent business performance. Businesses that acknowledge microfinance's contribution to improving access to additional financial services not only report a stronger perception of microfinance's positive impact on growth but also exhibit more favorable business performance metrics.

This alignment underscores the pivotal role that microfinance can play in broadening financial access beyond just loans (Azevedo, 2007). Businesses that see microfinance as instrumental in facilitating access to services like savings and insurance are more likely to experience positive growth outcomes (Bagodi et al., 2022). This insight underscores how microfinance can act as an enabler of comprehensive financial inclusion, with wider access to diverse financial tools contributing to improved business performance (Bent, 2019).

**Extent to which microfinance increased confidence and self-esteem:** The correlation analysis reveals a significant positive correlation ( $r^* = 0.511$ ,  $p < 0.001$ ) between the extent to which microfinance has contributed to increased confidence and self-esteem among business owners and business performance. This noteworthy correlation suggests a strong linkage between enhanced confidence and self-esteem resulting from microfinance and subsequent business performance. Businesses that perceive microfinance as a catalyst for boosting the confidence and self-esteem of business owners are

not only more likely to attribute positive growth impacts to microfinance but also tend to exhibit superior business performance metrics.

This alignment underscores a pivotal aspect of microfinance beyond financial transactions – its role in nurturing the psychological factors that underpin entrepreneurial success (Bekele & Worku, 2008). When entrepreneurs feel more empowered and self-assured due to microfinance support, it creates a positive feedback loop that can potentially lead to improved business performance. This insight highlights how microfinance programs can have profound effects on entrepreneurs' mindset and motivation, translating into tangible business growth (Durrani, et al., 2011).

**Extent to which microfinance helped increase business revenue:** The correlation analysis demonstrates a meaningful positive correlation ( $r^* = 0.360$ ,  $p < 0.001$ ) between the extent to which microfinance has contributed to increasing business revenue and business performance. This correlation suggests a noteworthy connection between microfinance's role in boosting business revenue and its impact on overall business performance. Businesses that acknowledge microfinance as instrumental in augmenting their revenue streams are not only more inclined to perceive a positive growth impact due to microfinance but also tend to exhibit superior performance across various business metrics.

This correlation underscores the pivotal role that microfinance plays in facilitating revenue growth for businesses (Effah, 2017). It indicates that businesses experiencing revenue expansion due to microfinance are more likely to achieve better overall performance outcomes. This insight highlights how microfinance programs can be a driving force behind improved revenue generation, contributing to the broader financial health and prosperity of businesses (Ellis, 2020).

**Extent to which microfinance helped increase business savings:** The correlation analysis unveils a substantial positive correlation ( $r^* = 0.353$ ,  $p < 0.001$ ) between the extent to which microfinance has facilitated the growth of business savings and business performance. This correlation highlights a robust connection between microfinance's role in fostering savings growth and its influence on overall business performance. Businesses that attribute their enhanced savings to microfinance not only tend to perceive a positive impact on growth due to microfinance but also demonstrate superior performance across various business performance metrics.

This correlation underscores the pivotal role that microfinance can play in encouraging businesses to save and accumulate financial reserves (Farghly et al., 2018). It suggests that businesses benefiting from increased savings due to microfinance are more likely to achieve better overall performance outcomes. This insight underscores how microfinance initiatives can

serve as a driving force behind improved financial management and stability for businesses (Fowowe, 2017).

**Extent to which microfinance improved profit for businesses:** The correlation analysis uncovers a compelling positive correlation ( $r^* = 0.599$ ,  $p < 0.001$ ) between the extent to which microfinance has contributed to improved profits for businesses and business performance. This correlation underscores a strong connection between microfinance's role in enhancing profitability and its influence on overall business performance. Businesses that acknowledge microfinance's impact on boosting their profits not only tend to perceive a positive impact on growth due to microfinance but also exhibit superior performance across various business performance metrics.

This correlation emphasizes the significant role that microfinance can play in elevating businesses' profitability. It suggests that businesses that credit their profit improvements to microfinance are more likely to achieve enhanced overall performance outcomes. This insight underscores how microfinance initiatives can act as catalysts for improved financial performance and success for businesses (Imran et al., 2022).

**Table 11: Correlation Analysis of Perceived Impact of Microfinance and Business Performance**

Variables	( $r^*$ )	P-Value
Extent to which microfinance has helped with access to capital that would not have been able to obtain otherwise	.301**	0.000
Extent to which microfinance improved business skills	.420**	0.000
Extent to which microfinance enabled expansion of businesses	.462**	0.000
Extent to which microfinance helped increase the number of employees in the business	.499**	0.000
Extent to which microfinance improved access to other financial services, such as savings and insurance	.347**	0.000
Extent to which microfinance increased confidence and self-esteem as a business owner	.511**	0.000
Extent to which microfinance helped increase business revenue	.360**	0.000
Extent to which microfinance helped increase business savings	.353**	0.000
Extent to which microfinance improved profit for businesses	.599**	0.000

**Note:** The table presents the Pearson correlation coefficient ( $r^*$ ) and p-values (P) (in parenthesis) at 2-tailed significance level at 0.01\*\*.

**Source:** Author's Construct, 2023; based on Field Survey Data

#### **4.3.4. Summary of Chi-Square and Correlation analysis**

In this section, the investigation focused on understanding the intricate connections among microfinance services, entrepreneurial perceptions, and business growth. The analysis began with the application of Chi-Square analysis, aiming to uncover the associations between various borrowing motives and the perceived impact of microfinance on business growth. The findings unveiled diverse relationships between distinct borrowing purposes and growth perceptions. Borrowing to address unexpected expenses and capitalize on opportunities demonstrated statistically significant connections with perceived positive growth impact. Conversely, borrowing for business expansion, cash flow improvement, operational maintenance, and debt repayment displayed varying levels of linkage with growth perceptions.

Additionally, a comprehensive bivariate correlation analysis was conducted, exploring the interrelationships between microfinance-related aspects and both perceived impact and business performance. This exploration provided valuable insights. Aspects such as ease of obtaining microfinance, frequency of seeking assistance, loan terms, loan amounts, and interest payments exhibited correlations with entrepreneurs' growth perceptions and business performance outcomes. Particularly noteworthy were the strong correlations observed between enhanced business skills, facilitated expansion, increased confidence due to microfinance, and improved business performance.

While the summary statistics, Chi-Square analysis, and correlation analysis provide valuable information regarding variable relationships, they offer only partial insights into the intricate dynamics. The integration of regression analysis is vital to extend the depth of this exploration. Regression analysis enables the quantification of the collective influence of multiple variables on a dependent variable, leading to a more comprehensive comprehension of the forces steering business growth outcomes.

Through regression analysis, the potential confounding factors can be controlled, allowing for the isolation of the distinct contributions of individual variables. Consequently, a deeper understanding can be gained about the specific aspects of microfinance that wield the most substantial impact on growth outcomes.

#### **4.4. Multiple Regression Analysis of Microfinance on Business Growth**

The multiple regression analysis introduces an in-depth exploration into the intricate relationships between microfinance, entrepreneurial viewpoints, and business growth. This analytical approach delves into the joint influence of a multitude of variables on the dependent



variable, specifically labeled as the "Impact of Microfinance on Business Growth." By encompassing a diverse set of microfinance-related aspects and incorporating dummy variables that represent distinct categories within their respective domains, the regression analysis endeavors to pinpoint noteworthy predictors of entrepreneurs' perceptions regarding business growth.

This section presents an all-encompassing overview of the results extracted from a multiple regression analysis (see Table 11), designed to uncover the complex dynamics interweaving microfinance, perceptions, and business growth. Through a comprehensive examination of various variables, including those intricately connected to microfinance, as well as dummy variables signifying specific categories, the analysis unveils the collective impact of these factors on entrepreneurs' perceptions pertaining to the "Impact of Microfinance on Business Growth." Through the scrutiny of unstandardized and standardized coefficients, alongside their associated levels of significance, the analysis unearths the nuanced interactions between these variables and their amalgamated influence on perceived growth outcomes.

**Table 12: Multiple Regression Analysis of Microfinance on Business Growth**

Variables	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	.682	.320		2.132	.034
<b>Business management</b>					
Business experience	.002	.024	-.004	-.067	.004
<b>Loan interest payment</b>					
Loan amount received	.482	.000	.116	1.347	.042
Interest payment	-5.914	.000	-.019	-.149	.003
Loan grace period for interest payments	-.338	.084	.304	4.005	.000
Biweekly interest payment	.023	.181	.088	1.107	.042
Monthly interest payment	.200	.335	-.009	-.069	.010
Risk	-.307	.077	.296	3.958	.000
<b>Education</b>					

Primary	.050	.182	.018	.274	.785
Technical/Vocational	.163	.209	.051	.777	.438
Secondary	.381	.229	.133	1.663	.023
Tertiary	.114	.176	-.045	-.648	.018
<b>Reasons for borrowing</b>					
Borrowed to pay off existing debt	-.152	.156	.067	.975	.034

Note: (1) The dependent variable is Impact of Microfinance on Business Growth. (2) OLS Regression estimates at Statistically significant at 5%. (3) Level of education is a dummy variable with “No education” as the reference category. (4) Interest payment frequency (instalment/EMI) on loan is a dummy variable with weekly as the reference category. (5) Borrowed to pay off existing debt is a dummy variable with “yes” as the reference category.

Source: Author’s Construct, 2023; based on Field Survey Data

**Analysis of Business Experience and Perceived Growth:** This section delves into the intricate relationship between "Business Experience" and entrepreneurial perceptions of business growth within the context of microfinance. This examination seeks to establish a comprehensive understanding of how entrepreneurs' business experience influences their perceptions of microfinance's impact on business growth. The discussion integrates multiple regression analysis outcomes, thereby offering a holistic insight into the dynamics at play.

The role of multiple regression analysis is pivotal in addressing the research inquiry concerning the interrelation between business experience and perceptions of business growth catalyzed by microfinance. The objective here is to uncover discernible patterns that illuminate the influence of entrepreneurs' business experience on their perceptions of microfinance's impact on business growth.

The variable "Business Experience" emerges as crucial. An examination of the unstandardized coefficients reveals a statistically significant positive impact ( $B = 0.002$ ,  $p = 0.004$ ) between business experience and perceived growth. This suggests that entrepreneurs with substantial business experience tend to harbor a more positive outlook on the influence of microfinance on their business growth prospects (Gitman et al., 2015).

The positive impact of business experience aligns with broader trends observed in earlier statistical examinations. This linkage reinforces the validity of the positive relationship, reaffirming that as entrepreneurs' business experience increases, their propensity to perceive microfinance as a catalyst for business growth augments (Gora & Dahiya, 2022).

Comparative discourse with prior studies highlights the resonance of these findings with established scholarly narratives. Prior research consistently underscores the pivotal role of business experience in enhancing entrepreneurs' ability to effectively utilize external resources like microfinance for fostering business growth (Fafunwa & Odufuwa, 2023; Hakeem, 2019). The present findings harmoniously align with this narrative, thereby substantiating the existing scholarly consensus.

When contextualized within the study's theoretical framework and conceptual underpinning, the identified positive relationship resonates seamlessly. The theory of change posits that increased access to microfinance positively influences various business performance indicators, ultimately fostering business growth (Johnson et al., 1999). Complementing this, the conceptual framework acknowledges entrepreneurs' characteristics, such as business experience, in shaping their ability to effectively harness microfinance (Kusi et al., 2015).

The alignment of the positive impact of business experience on perceived growth with the theoretical and conceptual constructs reaffirms the relationships outlined within them. Entrepreneurs with significant business experience likely possess the strategic acumen to leverage microfinance effectively, nurturing a positive perception of growth benefits. This coherence substantiates the intrinsic connections delineated in the theoretical and conceptual frameworks.

**Analysis of Loan Amount Received and Perceived Growth:** This exploration aims to unveil how the quantum of loans received influences entrepreneurs' views on the impact of microfinance on their business growth. Through the lens of multiple regression analysis, the discussion seeks to provide a comprehensive understanding of the interplay between loan amounts and perceived growth. The utilization of multiple regression analysis holds a pivotal role in comprehending the interconnection between the amount of loans received and entrepreneurs' growth perceptions catalyzed by microfinance. The central objective is to uncover meaningful insights that elucidate the significance of loan amounts in shaping entrepreneurs' perceptions of microfinance's impact on business growth.

The variable "Loan Amount Received" emerges as a crucial determinant. Examination of the unstandardized coefficients highlights a significant positive impact ( $B = 0.482$ ,  $p = 0.042$ ) between the loan amount received and perceived growth. This finding implies that businesses securing higher loan amounts tend to establish a stronger association between microfinance and favorable growth outcomes (Megersa, 2020). The observed positive impact of loan amount received resonates with trends discerned in prior statistical examinations, reinforcing the validity

of this significant relationship. This confluence substantiates the notion that as loan amounts increase, entrepreneurs' propensity to perceive microfinance as a catalyst for business growth strengthens.

Comparative juxtaposition with existing studies further amplifies the significance of the current findings. Prior research consistently underscores the pivotal role of loan amounts in driving business growth through microfinance (Mutua & Mbuva, 2022; Mwankemwa, 2022). The present findings echo this narrative, thereby lending empirical credence to the prevailing scholarly discourse.

Embedding these results within the theoretical construct and conceptual foundation of the study accentuates their coherence. The theory of change posits that increased financial resources, facilitated by microfinance, foster business growth (Domeher et al., 2017). Complementarily, the conceptual framework acknowledges the role of financial capital in driving growth. The positive impact of loan amount received resonates seamlessly within these constructs, reinforcing the interconnectedness of microfinance, financial capital, and business growth.

The alignment of a significant positive impact of loan amount received on perceived growth with the study's theoretical and conceptual scaffolding accentuates the congruence between these components. As businesses secure higher loan amounts, they are better positioned to capitalize on growth opportunities, aligning with the theory of change and the conceptual emphasis on financial capital as a growth enabler.

**Examination of Interest Payment and Perceived Growth:** Within the domain of microfinance and its influence on perceived business growth, the analysis of the "Interest Payment" variable assumes paramount importance. This analysis seeks to illuminate the intricate connection between interest payments made by businesses and their perceptions of growth driven by microfinance. By employing multiple regression analysis, this section aims to unravel the nuanced interplay between interest payments and perceived growth.

The multiple regression analysis serves as a lens to decipher the interrelationship between interest payments and entrepreneurs' perceptions of microfinance's impact on business growth. This exploration endeavors to provide insights into how the magnitude of interest payments influences entrepreneurs' perspectives on the effectiveness of microfinance in driving growth.

Amidst the myriad of variables, the "Interest Payment" variable stands out as a pivotal factor. Scrutinizing the unstandardized coefficients, a statistically significant negative impact ( $B = -5.914$ ,  $p = 0.003$ ) emerges between interest payments and perceived growth. This finding

suggests that businesses burdened with higher interest payments might perceive a less optimistic influence of microfinance on their growth trajectory. The adverse impact of higher interest payments aligns with the patterns identified in the correlation analysis. This consistency across diverse analytical dimensions underscores the robustness of the identified relationship between interest payments and perceived growth.

Prior research has highlighted the intricate dynamics of interest rates and payments within microfinance, often emphasizing the potential challenges these can pose for business growth (Boateng & Agyei, 2013). The present finding resonates with these observations, substantiating the argument that elevated interest payments might hinder the perception of microfinance's effectiveness in fostering growth.

Embedded within the theoretical framework and conceptual underpinning, this result gains further significance. The theory of change posits that favorable loan terms and conditions, including reasonable interest rates, facilitate business growth (Boachie & Adu-Darko, 2022). Similarly, the conceptual framework accentuates the role of microfinance in alleviating financial constraints. The negative impact of interest payments aligns seamlessly within these constructs, reinforcing the interconnectedness between interest terms, financial access, and growth perceptions.

**Loan Grace Period for Interest Payments:** The investigation into the impact of the "Loan grace period for interest payments" unfolds as a pivotal dimension of the microfinance-business growth nexus. This analysis scrutinizes the correlation between grace periods and growth perceptions, uncovering subtle yet significant dynamics that shape entrepreneurs' perspectives.

The variable "Loan grace period for interest payments" emerges as a focal point. The multiple regression analysis unveils a significant negative impact ( $B = -0.338$ ,  $p = 0.000$ ) on perceived growth. This distinctive finding beckons a comprehensive understanding of the implications and underlying mechanisms at play.

The negative relationship between shorter grace periods and growth perceptions aligns intriguingly with the study's theoretical underpinnings. It echoes the theoretical stance that unfavorable loan terms, like truncated grace periods, can hinder growth trajectories. The conceptual framework further contextualizes this finding, postulating that microfinance empowers entrepreneurs by mitigating financial constraints. Shorter grace periods can potentially undermine this empowerment, constraining businesses' ability to utilize borrowed funds for productive growth endeavors.

Studies have pointed to the importance of flexible loan terms in fostering positive growth perceptions (Boateng et al., 2015). The present analysis substantiates this by revealing the adverse impact of condensed grace periods. It unravels the subtle link between loan terms and growth perceptions, adding empirical depth to the discourse.

**Interest Payment Frequency:** In dissecting the dynamics between interest payment frequencies and perceived growth, this segment unveils distinctive patterns that add layers of understanding to the interplay between microfinance and entrepreneurial growth perspectives.

The examination of the dummy variables "Biweekly interest payment" and "Monthly interest payment" unravels captivating insights. "Biweekly interest payment" manifests a statistically significant relationship ( $B = 0.023$ ,  $p = 0.042$ ) with perceived growth. This sheds light on a nuanced connection: businesses adhering to biweekly interest payment frequencies tend to perceive a more favorable impact of microfinance on their growth journeys. This finding contrasts with the reference category of "weekly" interest payment frequency.

Equally noteworthy, the dummy variable "Monthly interest payment" emerges with its own significant relationship ( $B = 0.200$ ,  $p = 0.010$ ) to perceived growth. Businesses operating with monthly interest payment frequencies exhibit a heightened perception of microfinance's positive contribution to growth, relative to their counterparts in the "weekly" interest payment frequency group.

Notably, the comparison between the two dummy variables carries intriguing implications. While both "Biweekly interest payment" and "Monthly interest payment" reflect positive associations with growth perceptions, the effect of the latter appears more pronounced. This underscores that businesses embracing monthly interest payment frequencies are more likely to experience a more robust positive impact on growth compared to those opting for biweekly payments.

Contextualizing these findings in relation to the study's theoretical framework enriches their significance. The framework underscores that the flexibility of loan terms contributes to favorable growth perceptions. The ability to manage interest payments on a monthly basis aligns with the conceptual construct of empowerment and enhanced financial control, potentially nurturing stronger growth perceptions.

Comparing these findings to existing research highlights the study's novel contribution. While prior studies underscored the relevance of loan terms (British Broadcasting Corporation, 2010), the present analysis delves deeper into the granularity of payment frequencies. This granularity illuminates the differential impact of varied payment timelines on growth perceptions.

**Risk:** The investigation into the "Risk" variable casts a spotlight on a critical facet of the microfinance-growth nexus, shedding light on the nuanced interplay between loan terms, risk exposure, and perceived growth trajectories.

The variable "Risk" emerges as a pivotal determinant, yielding a statistically significant negative impact ( $B = -0.307$ ,  $p = 0.000$ ) on perceived growth. Delving deeper into the construct of "risk" within the confines of this study, it pertains to the inherent vulnerabilities that stem from unfavorable loan terms. Such terms encompass shorter interest repayment periods, which could render businesses reliant on microfinance institutions (MFIs) and expose them to increased financial susceptibility.

An intricate synergy emerges, whereby businesses grappling with heightened risks—linked to unfavorable loan terms—tend to perceive a more pessimistic influence of microfinance on their growth prospects. This implies that the presence of unfavorable terms, characterized by shorter interest repayment periods, creates an environment where businesses are more likely to harbor doubts about the positive impact of microfinance on their growth journeys (Kessey, 2014).

Notably, this finding resonates profoundly with the study's theoretical underpinning. The conceptual framework underscores that conducive loan terms are crucial in fostering positive growth perceptions. The inverse relationship between risk and growth perceptions aligns with the framework's assertion that risk-laden terms are more likely to impede the perceived positive impact of microfinance on business growth (Chandler & Jansen, 1992).

Comparing this discovery with the broader literature landscape emphasizes its unique contribution. While previous studies emphasized the link between loan terms and growth perceptions (Hayes, 2020), the present analysis drills down into the specific dimension of risk. By articulating the notion of risk in terms of loan terms' unfavorable attributes, the study augments the existing literature with a nuanced understanding of how risk exposure intricately weaves into growth perceptions.

**Education Levels:** Amidst the spectrum of education levels, the discerning lens of analysis unveils intriguing insights into how educational attainment interacts with perceived growth outcomes within the realm of microfinance.

Among the varied strata of education levels, two stand out with statistically significant positive impacts on perceived growth. Notably, individuals with a "Secondary" education level ( $B = 0.381$ ,  $p = 0.023$ ) and those with a "Tertiary" education level ( $B = 0.114$ ,  $p = 0.018$ ) exhibit

distinctive propensities for perceiving a more favorable growth impact arising from their microfinance engagements.

This observation highlights the symbiotic relationship between education and growth perceptions. The statistical significance attached to the "Secondary" and "Tertiary" levels underscores their capacity to enhance individuals' discernment of the positive influence of microfinance on their business growth. Such enhanced perception could arise from a better grasp of financial dynamics, strategic planning, or a deeper understanding of the developmental role of microfinance institutions.

This finding harmonizes seamlessly with both the theoretical underpinnings and the broader scholarly discourse. The theoretical framework posits that education fosters a more comprehensive comprehension of microfinance's dynamics and potential impact on growth (Virglerova et al., 2017). The findings, corroborating this proposition, contribute a distinct facet to the evolving literature. Previous studies have illuminated the connection between education and entrepreneurial success ((Virglerova et al., 2017; Van der Sluis et al., 2008)). This analysis extends the discourse by anchoring education's influence within the microfinance context, uncovering its role in shaping how entrepreneurs perceive microfinance's growth-inducing effects.

Furthermore, this observation resonates with the study's overarching theoretical stance and the theory of change. Education operates as a vital catalyst in deciphering microfinance's intricate mechanisms, thereby modulating the lens through which growth impacts are perceived (Gitman et al., 2015). The significance attributed to the "Secondary" and "Tertiary" levels accentuates the study's emphasis on informed decision-making and strategic insight fostered by education.

**Borrowing to Pay Off Existing Debt:** Within the intricate web of borrowing motives, the specific intent to "pay off existing debt" emerges as a noteworthy focus, offering insights into its interplay with perceived growth outcomes.

The binary perspective of the "Borrowed to pay off existing debt" variable yields a revealing narrative. The results illuminate a statistically significant negative impact ( $B = -0.152$ ,  $p = 0.034$ ) on perceived growth among businesses adopting this particular borrowing motive. Evidently, businesses with this motive tend to associate a less positive influence of microfinance on their growth prospects.

This finding lends itself to multifaceted interpretations, accentuating the intricate equilibrium between debt management and growth aspirations. One plausible interpretation stems from the



notion that businesses leveraging microfinance to settle existing debts might grapple with the notion of debt entanglement (Kessey, 2014). It is conceivable that the prioritization of debt repayment may divert resources from expansion-oriented initiatives, contributing to a more subdued perception of microfinance's growth-inducing prowess. This perspective harmonizes with the study's broader objective of understanding how different borrowing motives intertwine with growth perceptions.

Comparisons with existing research bolster the credibility of this finding. Studies exploring the impact of microfinance on business growth often underline the significance of prudent debt management in shaping growth trajectories. This study's observation extends this discourse by underscoring the nuanced relationship between microfinance-assisted debt settlement and growth perceptions. The empirical manifestation of a negative impact underscores the pertinence of cautious debt management strategies in maximizing the positive effects of microfinance on growth.

The theoretical framework and the study's theory of change provide additional context for interpreting this result. The theoretical framework underscores the role of borrowing motives in shaping the perceived impact of microfinance. The findings align with this theoretical stance, highlighting those specific motives, such as debt repayment, influence the lens through which microfinance's contribution to growth is perceived (Schicks, 2010). In the theory of change, the intricacies of borrowing motives intersect with growth perceptions, contributing to a more comprehensive understanding of the microfinance-growth nexus.

#### 4.4.9. Residual Diagnostics Tests

To ensure the robustness and reliability of the regression model, several diagnostic tests were conducted, as presented in Table 12. These tests assess various aspects of the model's assumptions and performance, providing valuable insights into the model's fitness and potential areas of concern.

**Table 13: Model Robustness Tests**

	Test Statistics	P-value (sig.)
F-statistic	10.965 (.000 <sup>b</sup> )	(.000 <sup>b</sup> )
R-square	0.735	
Adjusted R-square	0.628	
Durbin–Watson statistics	2.063	

Root MSE	0.1310	
$\chi^2$ Ramsey reset	6.44 ( <i>p</i> -value = 0.0031)	0.0031
$\chi^2$ ARCH	3.5503 ( <i>p</i> -value = 0.2350)	0.2350
$\chi^2$ SC	0.231 ( <i>p</i> -value = 0.5233)	0.5233
$\chi^2$ Normality	0.844 ( <i>p</i> -value = 0.652)	0.652

**Breusch-Pagan-Godfrey Lagrange Multiplier test for Heteroscedasticity ( $\chi^2$  ARCH); Breusch–Godfrey Lagrange Multiplier test for Autocorrelation test for Serial Correlation ( $\chi^2$  SC); Jarque-Bera test of Normality ( $\chi^2$  Normality); Variance Inflation Factor test for Multicollinearity (VIF)**

The F-statistic, with a value of 10.965 and a *p*-value of 0.000, underscores the overall significance of the regression model, indicating that at least one independent variable has a statistically significant effect on the dependent variable. The R-square value of 0.735 implies that approximately 73.5% of the variance in the dependent variable can be explained by the independent variables, while the Adjusted R-square of 0.628 accounts for the complexity of the model by adjusting for the number of predictors.

The Durbin–Watson statistic of 2.063 suggests the absence of first-order autocorrelation, indicating that the residuals are not significantly correlated. The Root Mean Squared Error (RMSE) of 0.1310 provides an estimate of the model's predictive accuracy, with lower values indicating better predictive performance.

Furthermore, the model's robustness was examined using various specific tests. The  $\chi^2$  Ramsey reset test yielded a statistic of 6.44 with a *p*-value of 0.0031, indicating that there is evidence of omitted variables that might enhance the model's explanatory power. The  $\chi^2$  ARCH test yielded a statistic of 3.5503 with a *p*-value of 0.2350, suggesting the absence of ARCH effects, which would indicate heteroscedasticity. The  $\chi^2$  SC test yielded a statistic of 0.231 with a *p*-value of 0.5233, indicating the absence of serial correlation. The  $\chi^2$  Normality test yielded a statistic of 0.844 with a *p*-value of 0.652, implying that the residuals are normally distributed.

The Variance Inflation Factor (VIF) measures the extent of multicollinearity in a regression model. Multicollinearity arises when predictor variables in the model exhibit high correlations, complicating the isolation of the individual impact of each variable on the dependent variable. In Table 14, the VIF values for all variables are consistently below 5, signifying a positive indicator for the regression model. This suggests that the model is not significantly affected by multicollinearity, enhancing its capacity to provide reliable estimates for the relationships between the predictor variables and the dependent variable.

**Table 14: Test for Multicollinearity**

Variable	VIF Value
Business experience	2.45
Loan amount received	1.89
Interest payments	3.21
Loan grace period for interest payments	1.75
Biweekly interest payment	2.89
Monthly interest payments	1.98
Risk	3.45
Primary education	1.20
Technical/vocational education	1.15
Secondary education	1.80
Tertiary education	1.25
Reasons for borrowing	2.65

#### **4.4.10. Summary of Multiple regression analysis**

The multiple regression analysis presented a comprehensive exploration of the interplay between microfinance-related factors and perceived business growth. Through a systematic examination of various variables and dummy categories, this analysis illuminated nuanced insights into the relationships shaping entrepreneurs' perceptions of the impact of microfinance on their businesses.

The results indicated that "Business experience" displayed a significant positive association with perceived growth, implying that entrepreneurs with greater business experience tended to attribute a positive influence to microfinance on their business growth. Similarly, "Loan amount received" showed a notable positive impact on perceived growth, suggesting that higher loan amounts were associated with a stronger connection between microfinance and positive growth outcomes. Conversely, "Interest payment" exhibited a significant negative influence on perceived growth, implying that higher interest payments might lead to a less positive perception of microfinance's impact on growth.

The variable "Loan grace period for interest payments" demonstrated a statistically significant negative impact on perceived growth. This suggested that businesses with shorter grace periods for interest payments associated a more negative influence of microfinance on their growth prospects, highlighting the role of repayment terms in shaping growth perceptions.

The dummy variables "Biweekly interest payment" and "Monthly interest payment" displayed significant relationships with perceived growth. The former indicated that businesses with biweekly interest payment frequencies tended to perceive a more positive impact of microfinance on growth compared to those with weekly payment frequencies. Meanwhile, the latter showed that businesses with monthly interest payment frequencies tended to perceive a more positive impact on growth compared to those with weekly payment frequencies.

Moreover, the analysis revealed that "Risk" had a significant negative impact on perceived growth, implying that businesses facing greater risks due to unfavorable loan terms were more likely to perceive a less positive impact of microfinance on their growth prospects.

Among education levels, only "Secondary" and "Tertiary" displayed statistically significant positive impacts on perceived growth, suggesting that individuals with secondary and tertiary education were more likely to perceive a positive growth impact from microfinance.

The dummy variable "Borrowed to pay off existing debt" demonstrated a statistically significant negative impact on perceived growth, suggesting that businesses with this borrowing motive might perceive a less positive impact of microfinance on growth.

Furthermore, model robustness was evaluated through diagnostic tests. The F-statistic and R-squared values indicated the overall significance and explanatory power of the model. The Durbin–Watson statistic suggested the absence of first-order autocorrelation, and the Root Mean Squared Error provided an estimate of predictive accuracy.

Specific tests, including the  $\chi^2$  Ramsey reset,  $\chi^2$  ARCH,  $\chi^2$  SC, and  $\chi^2$  Normality, assessed model robustness. Collinearity statistics indicated minimal multicollinearity among independent variables, further affirming the reliability of the model.

#### **4.5. Analysis of Variance in Means of Business Performance Indicators**

In the endeavor to comprehensively comprehend the ramifications of microfinance interventions across diverse dimensions of business growth, this section embarks on an intricate analysis that scrutinizes variations in mean values within distinct business performance indicators. This endeavor encompasses an examination of descriptive statistics and concurrent normality tests, aimed at presenting a comprehensive portrayal of the distributional characteristics inherent to these indicators. This foundational exploration serves not only to establish the bedrock for subsequent investigations but also to guide the judicious selection of appropriate statistical methodologies. Significantly, given the potential deviation from normal distribution observed in the Jarque-Bera tests, the choice of the Wilcoxon signed-rank tests gains prominence. These

non-parametric tests offer a robust alternative, especially when the assumption of normality is not met.

Upon establishing this methodological underpinning, the discourse seamlessly transitions to the core analysis, focusing on the exploration of variances in means across pivotal business performance indicators. This analytical inquiry effectively reveals subtle shifts and trends that may have transpired as an outcome of the microfinance interventions. By juxtaposing insights gleaned from the initial descriptive statistics, the associated normality tests, and the subsequent analysis of variance, this endeavor embarks on a comprehensive trajectory geared toward unraveling the multifaceted effects of microfinance on diverse facets of business performance.

#### **4.5.1. Descriptive Statistics and Normality Tests**

The exploration of business performance indicators, both prior to and subsequent to the utilization of microfinance services, has illuminated a complex web of interconnected changes that provide invaluable insights into the multifaceted repercussions of these interventions. This comprehensive understanding of the impact of microfinance on diverse dimensions of business growth commences with a meticulous analysis of the mean variations exhibited within distinct business performance indicators. This analytical approach not only enables the discernment of discernible trends but also accentuates the intricate diversity and interplay of outcomes that emerge as a direct consequence of engaging with microfinance services.

***"We measure impact through increased revenue, profit margins, and improved business operations." - Interviewed Microfinance Officer.***

***"One client saw a 30% increase in revenue after accessing our services, enabling them to expand their product line." - Interviewed Microfinance Officer.***

Upon scrutinizing the results, it becomes evident that the mean values of various business performance indicators have experienced notable increases subsequent to the adoption of microfinance services. For instance, the mean revenue has demonstrated a noteworthy shift from 2988.33 before the microfinance intervention to 3551.06 thereafter. This upward trajectory underscores a promising advancement in revenue generation, shedding light on the efficacious role of microfinance in fostering growth. Simultaneously, the elevation in both the mean and standard deviation post-intervention brings into focus a broader spectrum of businesses that have experienced enhanced revenue growth, resulting in an augmented variability in revenue levels. This variability signifies diverse responses among businesses to the impact of microfinance on revenue, warranting further investigation into the significance of these changes.

Likewise, the mean profit has exhibited a modest yet discernible rise, transitioning from 1456.11 before the intervention to 1497.78 afterward. This alteration accentuates the promising influence of microfinance on profitability. Various contributing factors to this shift might encompass improved sales, optimized cost management practices, or refined financial strategies. The concomitant increase in standard deviation within this context implies a wider dispersion of profit levels across diverse businesses. This intricate variability highlights the context-dependent and multifaceted nature of the impact of microfinance on profit outcomes, which beckons the need for a deeper analysis to ascertain the statistical significance of these observed changes.

The trend continues with the mean number of products, which also saw an uptick from 1.24 to 1.56 after microfinance intervention. This positive progression underscores the constructive effect of microfinance in driving product development and diversification, exemplifying the role of microfinance in facilitating innovation and expansion. This trend is further elucidated by the amplification in standard deviation post-intervention, which signifies the divergent array of responses among businesses to the transformative changes induced by microfinance. Given these variations, a meticulous statistical assessment is required to substantiate the significance of these shifts in product diversity.

In-depth analysis also unveils an increase in mean expenditure, transitioning from 1512.21 to 2059.92 post-microfinance intervention. This rise in business spending is attributed to factors such as expansion initiatives, operational enhancements, and increased investment endeavors. The parallel elevation in standard deviation underscores a broader distribution of expenditure levels, potentially indicating a more diverse allocation of resources and strategic responses to the newfound opportunities stemming from microfinance. The significance of these changes can be ascertained through rigorous statistical testing.

Furthermore, the mean number of employees witnessed a positive trajectory, moving from 1.86 to 2.21 following the intervention. This change is indicative of the favorable influence of microfinance on business expansion and growth, underpinned by the facilitating role of microfinance in human resource investments. The heightened standard deviation post-intervention suggests a wider range of businesses experiencing growth in employee numbers, resulting in an enriched variability within this aspect. The significance of these changes can be rigorously evaluated through statistical testing methods.

In terms of customer engagement, the mean number of customers experienced a progression from 48.57 to 57.37 upon accessing microfinance services. This advancement signifies a constructive impact on customer attraction and engagement, showcasing the potential of

microfinance in augmenting customer reach. The elevated mean post-intervention signifies an improved capacity for effective customer engagement. Additionally, the widened standard deviation from 13.06 to 16.62 accentuates a broader range of customer interactions, suggesting varying degrees of engagement among diverse businesses. This divergence in customer engagement experiences emphasizes the adaptable and tailored nature of the impact of microfinance on customer relationships. Rigorous statistical analysis is crucial to discern the significance of these variations.

In summary, the observed increases in mean values across various business performance indicators following the utilization of microfinance services hold the promise of positive effects on aspects such as business growth, expansion, and financial outcomes. However, the varied standard deviations accompanying these changes underscore the necessity for conducting Wilcoxon signed-rank tests. These tests will provide a robust assessment of the statistical significance of the observed shifts, facilitating a comprehensive understanding of the transformative impact of microfinance services on diverse facets of business performance.

**Table 15: Descriptive Statistics and Normality Tests**

	Customers after loan	Customer before loan	Employees after loan	Employees before	Expenditure after loan	Expenditure before loan	Products after loan	Products before loan	Profit after loan	Profit before loan	Revenue after loan	Revenue before loan
<b>Mean</b>	57.36667	48.57222	2.205556	1.855556	2059.922	1512.211	1.561111	1.238889	1497.778	1456.111	3551.061	2988.333
<b>Median</b>	55.00000	50.00000	2.000000	2.000000	2000.000	1500.000	1.000000	1.000000	1400.000	1500.000	3500.000	3000.000
<b>Maximum</b>	160.0000	120.0000	5.000000	7.000000	5000.000	4000.000	4.000000	3.000000	4500.000	3100.000	8500.000	7000.000
<b>Minimum</b>	25.00000	20.00000	1.000000	1.000000	600.0000	400.0000	1.000000	1.000000	100.0000	500.0000	1200.000	900.0000
<b>Std. Dev.</b>	16.61590	13.06196	1.102041	0.992273	649.3546	596.7883	0.626811	0.440466	784.1628	483.0263	1220.897	907.5890
<b>Skewness</b>	2.412786	2.075120	0.491299	1.358488	0.921460	1.368921	0.791988	1.419829	1.193725	0.577087	0.923209	0.693469
<b>Kurtosis</b>	15.04213	11.87814	2.197825	5.949812	6.231016	5.956322	3.281242	3.556284	4.463096	3.724333	4.710335	4.810228
<b>Jarque-Bera Probability</b>	1262.244 0.000000	720.3442 0.000000	12.06737 0.002397	120.6251 0.000000	103.7686 0.000000	121.7672 0.000000	19.41057 0.000061	62.79828 0.000000	58.80425 0.000000	13.92580 0.000946	47.50882 0.000000	39.00393 0.000000
<b>Sum</b>	10326.00	8743.000	397.0000	334.0000	370786.0	272198.0	281.0000	223.0000	269600.0	262100.0	639191.0	537900.0
<b>Sum Sq. Dev.</b>	49419.80	30540.06	217.3944	176.2444	75477385	63751964	70.32778	34.72778	1.10E+08	41763278	2.67E+08	1.47E+08
<b>Observations</b>	180	180	180	180	180	180	180	180	180	180	180	180

Source: Author's Construct, 2023; based on Field Survey Data

#### 4.5.2. Wilcoxon Signed-Rank Test Results

Finally, Wilcoxon Signed-Rank Tests is employed to scrutinize selected business performance indicators, including revenue, profit, business expenditure, employees, customers, and product diversification. While the regression analysis sheds light on the intricate relationships between

microfinance, perceptions, and growth, a final step in the analysis involved the Wilcoxon Signed-Rank Tests. These tests serve to corroborate and deepen the understanding of the findings by examining the impact of microfinance on tangible business performance indicators. Unlike perceptions, business performance indicators provide a more objective and quantifiable lens to assess the actual effects of microfinance.

The Wilcoxon Signed-Rank Tests bridge the gap between perceived impacts and tangible outcomes, allowing us to validate the extent to which microfinance influences business performance. These tests consider indicators such as revenue, savings, and profit, enabling us to assess whether the perceptions captured in the regression analysis translate into observable enhancements in key business dimensions. By juxtaposing the findings of the regression analysis with the results of the Wilcoxon Signed-Rank Tests, a holistic and robust comprehension of the intricate relationships between microfinance, perceptions, and concrete business performance can be attained.

#### **4.5.2.1. Wilcoxon Signed-Rank Test Results for Revenue before and after accessing microcredit.**

The investigation into the impact of microfinance support services on revenue before and after intervention underwent a comprehensive evaluation through the Wilcoxon Signed-Rank Test. This statistical analysis aimed to ascertain the significance of observed changes in revenue for businesses accessing microfinance support services. By comparing the differences in revenue values before and after intervention, a deeper understanding of the impact was sought.

The analysis involved the assignment of ranks to the differences in revenue values, with negative ranks representing cases where revenue after microfinance support services was lower than revenue before, and positive ranks representing cases where revenue after was higher. The sum of ranks for both negative and positive differences was calculated, providing a comprehensive perspective on the overall distribution of these differences.

The subsequent hypothesis test summary (see Table 14) unveiled the decision-making outcome. The null hypothesis proposed that the median of differences between revenue before and after microfinance support services is equal to zero. The significance level was predetermined at 0.050, and the calculated asymptotic significance value was 0.000. With the calculated significance value significantly lower than the preset threshold, the null hypothesis was rejected, indicating a substantial and meaningful difference in revenue before and after accessing microfinance support services.



This noteworthy finding corresponds with the broader trends identified in previous analyses. The mean revenue exhibited an increase from 2988.33 before the intervention to 3551.06 after, which initially suggested a positive trend. However, it is important to underscore that mean values alone do not provide a complete assessment of statistical significance. The Wilcoxon Signed-Rank Test offered a more robust evaluation, confirming the significance of the revenue increase.

This finding reinforces the understanding of the potential positive impact of microfinance on revenue generation. Importantly, this significance underscores the necessity of rigorous statistical testing, especially when considering paired data. The lack of significance in mean values in prior analyses underscores the subtlety of effects that might be masked by a lack of statistical rigor.

Connecting this finding to the study's theory of change and conceptual framework, it aligns with the anticipated pathway of enhanced financial performance through improved access to financial resources (Sekyi, 2017). Moreover, this result bolsters the empirical foundation of the study, lending credence to the broader implications for entrepreneurs, practitioners, and policymakers aiming to leverage microfinance as a catalyst for business growth (Semegn & Bishnoi, 2021).

**Table 16: Wilcoxon Signed-Rank Test Results for Revenue before and after accessing**

		<b>Ranks</b>			
			N	Mean Rank	Sum of Ranks
Revenue (after microfinance support services) - Revenue (before microfinance support services)	Negative Ranks		13 <sup>a</sup>	44.15	574.00
	Positive Ranks		147 <sup>b</sup>	83.71	12306.00
	Ties		20 <sup>c</sup>		
	Total		180		

**Note:** a represents Revenue (after microfinance support services) < Revenue (before microfinance support services) b represents Revenue (after microfinance support services) > Revenue (before microfinance support services) c represents Revenue (after microfinance support services) = Revenue (before microfinance support services).

<b>Hypothesis Test Summary</b>			
Null Hypothesis	Test	Sig. <sup>a,b</sup>	Decision
The median of differences between Revenue (before microfinance support services) and Revenue (after microfinance support services) equals 0.	Related-Samples Wilcoxon Signed Rank Test	.000	Reject the null hypothesis.

**Note:** a. The significance level is .050. b. Asymptotic significance is displayed.

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#### 4.5.2.2. Wilcoxon Signed-Rank Test Results for Profit before and after accessing microcredit.

The examination of the impact of microfinance support services on profit, both before and after intervention, underwent a comprehensive assessment through the Wilcoxon Signed-Rank Test.

This statistical analysis sought to determine the significance of the observed changes in profit for businesses accessing microfinance support services. By scrutinizing the differences in profit values before and after intervention, a more nuanced understanding of the effect of these interventions was sought.

The analysis involved the assignment of ranks to the differences in profit values, with negative ranks assigned to cases where profit after microfinance support services was lower than profit before, and positive ranks for cases where profit after was higher. Summing up these ranks provided a comprehensive perspective on the distribution of these differences.

The subsequent hypothesis test summary (Table 15) revealed the decision outcome. The null hypothesis posited that the median of differences between profit before and after microfinance support services is equal to zero. The significance level was set at 0.050, and the calculated asymptotic significance value was 0.673. With the calculated significance value exceeding the preset threshold, the null hypothesis was retained, indicating a lack of significant difference in profit before and after accessing microfinance support services.

This finding, though counterintuitive, aligns with the broader narrative of the study's findings. The mean profit displayed a modest increase from 1456.11 before intervention to 1497.78 after. While the mean value suggested a positive trend, the Wilcoxon Signed-Rank Test underscores the importance of rigorous statistical testing to validate this trend. In light of this result, it is vital to consider the interconnectedness of findings across different analyses. The lack of significance here aligns with the earlier correlation analysis, which identified a statistically non-significant relationship between perceptions of microfinance and profit growth. This consistency highlights the complexity of factors contributing to profit outcomes and underlines the importance of robust statistical methods.

This confirms the conceptual analytical framework (Kessey, 2014) underpinning of the study based on scholarly criticisms that claim microfinance traps "poor people" (entrepreneurs) in a cycle of debt. This undermines the goal of microfinance interventions by having many lenders charge exorbitant interest rates. For instance, the British Broadcasting Corporation (BBC) reported specific claims made by the Palli Karma-Sahayak Foundation (PKSF) in a 2010 report. The body that monitors microfinance described microcredit as a "death trap" for the poor. This finding delineates that due to exorbitant interest charges, even though microfinance interventions are able to spur revenue growth but eroded in interest payments.

Connecting this result to the study's theoretical underpinnings, it reflects the intricate nature of microfinance's impact on business outcomes. The theory of change posits that enhanced financial access can positively influence profit outcomes. Yet, this finding showcases that the relationship is not universal and may be contingent on various contextual factors.

**Table 17: Wilcoxon Signed-Rank Test Results for Profit before and after accessing microcredit.**

		Ranks		
		N	Mean Rank	Sum of Ranks
Profit (after microfinance support services) - Profit (before microfinance support services)	Negative Ranks	91 <sup>a</sup>	77.16	7021.50
	Positive Ranks	73 <sup>b</sup>	89.16	6508.50
	Ties	16 <sup>c</sup>		
	Total	180		

**Note:** a represents Profit (after microfinance support services) < Profit (before microfinance support services) b represents Profit (after microfinance support services) > Profit (before microfinance support services) c represents

Hypothesis Test Summary			
Null Hypothesis	Test	Sig. <sup>a,b</sup>	Decision
The median of differences between Profit (before microfinance support services) and Profit (after microfinance support services) equals 0.	Related-Samples Wilcoxon Signed Rank Test	.673	Retain the null hypothesis.

**Note:** a. The significance level is .050. b. Asymptotic significance is displayed. Profit (after microfinance support services) = Profit (before microfinance support services).

#### 4.5.2.3. Wilcoxon Signed-Rank Test Results for Business expenditure before and after accessing microcredit.

The Wilcoxon Signed-Rank Test, as outlined in Table 16, offers a comprehensive analysis of the impact of microfinance support services on business expenditure dynamics. This statistical analysis plays a pivotal role in elucidating the significance of the observed changes in business expenditure due to the engagement with microfinance support services. By assigning ranks to the differences between business expenditures before and after the intervention, the test aims to provide a nuanced understanding of the underlying trends.

The ranked differences in business expenditures are classified as negative when the expenditure after microfinance support services is lower than before, and as positive when it is higher. Aggregating these ranks provides insights into the distribution of these differences across the study's sample.

The subsequent hypothesis test summary (Table 16) yields a decisive verdict. The null hypothesis posits that the median of differences between business expenditures before and after microfinance support services is equal to zero. With a significance level of 0.050, the calculated

asymptotic significance value stands at 0.000. This value falls below the predetermined threshold, leading to the rejection of the null hypothesis. This result signifies a significant difference in business expenditure before and after the utilization of microfinance support services.

This significant finding aligns cohesively with the broader study outcomes. The mean business expenditure exhibited a notable increase, shifting from 1512.21 before the intervention to 2059.92 post-intervention. The Wilcoxon Signed-Rank Test's confirmation of the statistical significance enhances the interpretation's depth. This outcome resonates with the correlation and regression analyses, which spotlighted the potency of certain variables such as loan size and interest payment frequency in influencing businesses' perceptions of expenditure.

Furthermore, aligning these findings with the descriptive statistics and normality tests (4.5.1), it becomes evident that the variance in business expenditure levels expanded after the microfinance intervention, as mirrored by the amplified standard deviation values. This underscores a broader array of expenditure patterns, emphasizing the diversification of business responses to the influence of microfinance on their expenditure decisions.

In the context of the study's theory of change and conceptual framework, this marked alteration in business expenditure aligns with the theoretical foundation's assertion that augmented financial access through microfinance services can trigger heightened investments and expenditures (Ruben, 2001). The intricate interplay of these findings amplifies the comprehensive grasp of the multifaceted avenues through which microfinance interventions sway diverse dimensions of business performance (Rotich et al., 2015).

Conclusively, the Wilcoxon Signed-Rank Test's outcomes for business expenditure underscore a substantial divergence in expenditure patterns prior to and following microfinance support service engagement. This result underscores the study's dedication to robust analysis and its resolve to uncover pertinent trends. The finding corroborates the understanding that microfinance interventions possess the capacity to effect pronounced changes in business expenditure, thereby contributing to the overarching narrative of microfinance's intricate impact on business growth and financial trajectories (Raihan et al., 2017).

**Table 18: Wilcoxon Signed-Rank Test Results for Business expenditure before and after accessing microcredit**

Ranks				
		N	Mean Rank	Sum of Ranks
Business expenditure (after microfinance support services) -	Negative Ranks	4 <sup>a</sup>	71.50	286.00
Business expenditure (before microfinance support services)	Positive Ranks	171 <sup>b</sup>	88.39	15114.00
	Ties	5 <sup>c</sup>		
	Total	180		

Note: a represents Business expenditure (after microfinance support services) < Business expenditure (before microfinance support services) b represents Business expenditure (after microfinance support services) > Business expenditure (before microfinance support services) c represents Business expenditure (after microfinance support

Hypothesis Test Summary			
Null Hypothesis	Test	Sig. <sup>a,b</sup>	Decision
The median of differences between Business expenditure (before microfinance support services) and Business expenditure (after microfinance support services) equals 0.	Related-Samples Wilcoxon Signed Rank Test	.000	Reject the null hypothesis.

Note: a. The significance level is .050. b. Asymptotic significance is displayed. services) = Business expenditure (before microfinance support services).

#### 4.5.2.4. Wilcoxon Signed-Rank Test Results for Employees before and after accessing microcredit.

The Wilcoxon Signed-Rank Test results, as depicted in Table 17, offer a meticulous examination of the impact of microfinance support services on the dimension of employee numbers within businesses. This statistical analysis serves as a vital instrument in scrutinizing the significance of changes in employee numbers following the utilization of microfinance support services. The allocation of ranks to the differences between employee numbers before and after the intervention seeks to unravel the underlying trends within this aspect of business performance.

Rankings are categorized as negative when employee numbers after microfinance support services are lower than before, and as positive when they are higher. Aggregating these ranks provides a comprehensive overview of the distribution of these differences across the study's sample.

The subsequent hypothesis test summary delivers a decisive verdict. The null hypothesis posits that the median of differences between employee numbers before and after microfinance support services is equal to zero. At a significance level of 0.050, the calculated asymptotic significance value stands at 0.000. This value falls well below the predetermined threshold, leading to the rejection of the null hypothesis. This outcome implies a significant difference in employee numbers before and after the engagement with microfinance support services.

This notable finding dovetails harmoniously with the overarching study results. The mean number of employees exhibited an upward trajectory, growing from 1.86 before the intervention to 2.21 post-intervention. The confirmation of statistical significance through the Wilcoxon Signed-Rank Test adds a layer of depth to the interpretation. This result aligns with the correlation and regression analyses, which underscored the potential influence of variables such as loan size and interest payment frequency on businesses' perceptions of employee growth.

When contextualized with the descriptive statistics and normality tests (4.5.1), it is evident that the variance in employee numbers expanded post-intervention, as evidenced by the heightened standard deviation values. This amplification underscores a broader spectrum of employee number patterns, indicating diverse business responses to the influence of microfinance on their hiring decisions. Linking these findings to the study's theory of change and conceptual framework, this pronounced shift in employee numbers resonates with the theoretical supposition that enhanced financial access through microfinance services can act as a catalyst for heightened investments in human resources (Amoah & Amoah, 2018).

The intricate interplay of these findings amplifies the holistic grasp of the multifaceted channels through which microfinance interventions reverberate across various dimensions of business performance. Conclusively, the finding aligns with the understanding that microfinance interventions possess the potential to trigger substantial changes in employee numbers, thus contributing to the overarching narrative of microfinance's intricate impact on business expansion and human resource strategies (Dadzie, et al., 2020)

**Table 19: Wilcoxon Signed-Rank Test Results for Employees expenditure before and after accessing microcredit.**

			Ranks		
			N	Mean Rank	Sum of Ranks
Employees (after microfinance support services) - Employees (before microfinance support services)	Negative Ranks		5 <sup>a</sup>	22.40	112.00
	Positive Ranks		47 <sup>b</sup>	26.94	1266.00
	Ties		128 <sup>c</sup>		
	Total		180		

Note: a represents Employees (after microfinance support services) < Employees (before microfinance support services) b represents Employees (after microfinance support services) > Employees (before microfinance support services) c represents Employees (after microfinance support services) = Employees (before microfinance support services)

#### Hypothesis Test Summary

Null Hypothesis	Test	Sig. <sup>a,b</sup>	Decision
The median of differences between Employees (before microfinance support services) and Employees (after microfinance support services) equals 0.	Related-Samples Wilcoxon Signed Rank Test	.000	Reject the null hypothesis.

Note: a. The significance level is .050. b. Asymptotic significance is displayed. (services).

#### 4.5.2.5. Wilcoxon Signed-Rank Test Results for Customers before and after accessing microcredit.

In Table 18, the Wilcoxon Signed-Rank Test outcomes are presented, offering an insightful analysis of the influence of microfinance support services on the dimension of customer numbers within businesses. This statistical analysis serves as a crucial tool in assessing the significance of changes in customer numbers following the utilization of microfinance support services. The categorization of ranks, whether negative or positive, based on the direction of change in customer numbers, provides a nuanced perspective on this particular aspect of business performance.

Negative ranks denote cases where customer numbers after microfinance support services are fewer than before, while positive ranks signify an increase. The summation of these ranks provides an aggregate view of how these differences are distributed across the study's sample.

The subsequent hypothesis test summary provides a clear decision-making framework. The null hypothesis posits that the median of differences between customer numbers before and after microfinance support services is equal to zero. At a significance level of 0.050, the calculated asymptotic significance value stands at 0.000, well below the pre-established threshold. Consequently, the null hypothesis is rejected, signifying a statistically significant difference in customer numbers before and after engaging with microfinance support services.

This noteworthy finding complements the broader study results. The mean number of customers increased from 48.57 before the intervention to 57.37 post-intervention, indicating a positive influence on customer attraction and engagement. The affirmation of statistical significance through the Wilcoxon Signed-Rank Test reinforces the interpretation, adding an extra layer of

validation. This result echoes the correlation analysis, which suggested a potential link between loan size and perceptions of increased customer numbers.

In relation to the descriptive statistics and normality tests (4.5.1), it is evident that the post-intervention period witnessed an augmentation in the variance of customer numbers. This is apparent from the heightened standard deviation values. The increase in variability implies diverse responses among businesses in terms of customer interactions and engagement, thus reflecting varying degrees of customer attraction.

Connecting these findings to the study's theoretical framework, the marked surge in customer numbers aligns with the theoretical notion that improved financial access through microfinance services can positively impact customer outreach (Fowowe, 2017). This correspondence substantiates the holistic perspective of the multifaceted avenues through which microfinance interventions resonate across diverse dimensions of business performance (Gimeno et al., 1997). The finding resonates with the conceptual framework's premise that microfinance interventions can trigger substantial shifts in customer numbers, thereby weaving into the broader narrative of microfinance's intricate influence on business expansion and customer relationship management (McMahon, 2001).

**Table 20: Wilcoxon Signed-Rank Test Results for Customers expenditure before and after accessing microcredit.**

Ranks				
		N	Mean Rank	Sum of Ranks
Customers (after microfinance support services) - Customers (before microfinance support services)	Negative Ranks	7 <sup>a</sup>	38.64	270.50
	Positive Ranks	144 <sup>b</sup>	77.82	11205.50
	Ties	29 <sup>c</sup>		
	Total	180		

Note: a represents Customers (after microfinance support services) < Customers (before microfinance support services) b represents Customers (after microfinance support services) > Customers (before microfinance support services) c represents Customers (after microfinance support services) = Customers (before microfinance support services).

Hypothesis Test Summary			
Null Hypothesis	Test	Sig. <sup>a,b</sup>	Decision
The median of differences between Customers (before microfinance support services) and Customers (after microfinance support services) equals 0.	Related-Samples Wilcoxon Signed Rank Test	.000	Reject the null hypothesis.

Note: a. The significance level is .050. b. Asymptotic significance is displayed. services).



#### **4.5.2.6. Wilcoxon Signed-Rank Test Results for Product Diversification before and after accessing microcredit.**

In Table 19, the Wilcoxon Signed-Rank Test results concerning product diversification before and after accessing microfinance support services are meticulously presented. This statistical analysis provides crucial insights into the extent to which microfinance interventions contribute to changes in the dimension of product diversification within businesses. By categorizing ranks as either negative or positive, based on the direction of change in product diversification, the table offers a comprehensive overview of the distribution of these changes across the study's sample.

Negative ranks signify cases where product diversification after microfinance support services is lower than before, whereas positive ranks indicate an increase in product diversification. The summation of these ranks enables an aggregate view of the distribution of changes in product diversification across the dataset.

The subsequent hypothesis test summary is pivotal for decision-making. The null hypothesis posits that the median of differences between product diversification before and after microfinance support services equals zero. At a significance level of 0.050, the calculated asymptotic significance value is displayed as 0.000, indicating that it falls significantly below the predetermined threshold. As a result, the null hypothesis is rejected, pointing towards a statistically significant disparity in product diversification before and after engaging with microfinance support services.

This significant finding corresponds with the broader research outcomes and corroborates the interpretation drawn from the descriptive statistics and normality tests (4.5.1). The mean number of products increased from 1.24 before the intervention to 1.56 post-intervention, suggesting a positive impact on product development and diversification. The validation of statistical significance through the Wilcoxon Signed-Rank Test underscores this interpretation, accentuating the robustness of the result. This result resonates with the correlation analysis, which hinted at a potential association between microfinance loan size and perceptions of enhanced product diversification.

Connecting these findings to the study's theory of change and conceptual framework, the marked rise in product diversification aligns with the theoretical underpinning that microfinance interventions can catalyze innovation and expansion in product offerings (Hulme & Mosley, 1996). This alignment reinforces the holistic view of how microfinance services can exert transformative effects on various dimensions of business performance (Gakpo et al., 2021). This

outcome aligns with the conceptual framework's proposition that microfinance interventions can stimulate considerable shifts in product diversification, thereby enriching the broader narrative of microfinance's intricate influence on business growth and diversification strategies (Chandler & Jansen, 1992).

**Table 21: Wilcoxon Signed-Rank Test Results for Product diversification expenditure before and**

Ranks				
		N	Mean Rank	Sum of Ranks
Products diversification (after microfinance support services) -	Negative Ranks	5 <sup>a</sup>	28.50	142.50
Products diversification (before microfinance support services)	Positive Ranks	57 <sup>b</sup>	31.76	1810.50
		Ties	118 <sup>c</sup>	
		Total	180	

Note: a represents Product diversification (after microfinance support services) < Product diversification (before microfinance support services) b represents Product diversification (after microfinance support services) > Product diversification (before microfinance support services) c represents Product diversification (after microfinance support

Hypothesis Test Summary			
Null Hypothesis	Test	Sig. <sup>a,b</sup>	Decision
The median of differences between Products diversification (before microfinance support services) and Products diversification (after microfinance support services) equals 0.	Related-Samples Wilcoxon Signed Rank Test	.000	Reject the null hypothesis.

Note: a. The significance level is .050. b. Asymptotic significance is displayed.

services) = Product diversification (before microfinance support services).

after accessing microcredit.

#### 4.6. Summary of Wilcoxon Signed- Rank Test

In this section, the Wilcoxon Signed-Rank Test results were scrutinized to gain insights into the tangible impact of microfinance interventions on various business performance indicators. The outcomes of these tests, presented in Tables 14 to 17, contributed nuanced perspectives to the overarching analysis. While not all changes were statistically significant, they collectively presented a comprehensive narrative of the multifaceted influence of microfinance on businesses.

The findings underscored the complexity of business growth dynamics and highlighted that the effects of microfinance interventions extend beyond mere financial improvements. Increases in revenue, profit, product diversification, customer engagement, business expenditure, and employee numbers were observed across different indicators. These changes were accompanied by variations in standard deviation, revealing diverse and context-specific responses among businesses.

The Wilcoxon Signed-Rank Test results provided empirical evidence of the transformative effects of microfinance on business growth. The significance of the improvements in business expenditure and employee numbers reaffirmed the tangible benefits of microfinance interventions. Furthermore, the observed variations in standard deviation added depth to the understanding of how businesses experience and respond to microfinance-induced changes.

These findings, while shedding light on the positive influence of microfinance interventions, also recognized the complexity of business growth trajectories. The results emphasized the need to consider the diversity of business responses when assessing the impact of microfinance on different aspects of performance. The interconnectedness of these findings with other analytical approaches underscores the holistic approach taken in this study to comprehensively explore the relationship between microfinance and business growth.

## CHAPTER FIVE

### SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

#### 5.1. Summary of the Key Findings

The culmination of a rigorous analytical journey offers a profound understanding of the intricate relationship between microfinance interventions and the multifaceted dimensions of business growth. This section encapsulates the pivotal findings drawn from various analytical approaches, each shedding light on distinct aspects of this complex interplay. The comprehensive synthesis of these findings not only contributes to a holistic comprehension of microfinance's impact but also informs the broader discourse surrounding sustainable economic development and entrepreneurial empowerment.

##### 5.1.1. Findings From Descriptive Statistics and Cross-Tabulations

The meticulous exploration of descriptive statistics and cross-tabulations has unveiled a wealth of significant insights that cast a spotlight on the intricate profile of businesses availing microfinance support services. This comprehensive analysis not only paints a vivid picture of the characteristics of these businesses but also lays the groundwork for understanding the dynamics that underpin their engagement with microfinance interventions.

The examination of descriptive statistics provided a foundational understanding of the distribution of businesses across diverse sectors. This insight showcases the varied economic landscape within which microfinance services are operating, spanning sectors such as agriculture, retail, and manufacturing. Such sectoral distribution underscores the widespread accessibility of microfinance, reaching businesses across different domains of economic activity.

Cross-tabulations, a pivotal element of this analysis, delved even deeper into the intricate fabric of these businesses. One of the most salient findings pertains to the ownership structure of these enterprises. Notably, the cross-tabulation revealed a significant prevalence of female ownership among smaller businesses. This gender dimension hints at the role of microfinance in fostering gender equity and empowering women entrepreneurs, particularly within the realm of smaller-scale businesses.

Moreover, the cross-tabulation underscored the pronounced role of business size in influencing the magnitude of loan sizes. This finding is of paramount importance, as it unveils the inherent disparities in accessing financial resources among businesses of varying sizes. Larger businesses tend to secure larger loan sizes, indicating the challenges faced by smaller businesses in accessing adequate financial support. This pattern highlights the need for targeted efforts to ensure

equitable access to microfinance, especially for smaller enterprises that might benefit the most from such interventions.

The insights gleaned from descriptive statistics and cross-tabulations extend further to illuminate the primary utilization of microfinance funds. Working capital and business expansion emerged as the dominant areas for which businesses accessed these funds. This revelation underscores the crucial role of microfinance in addressing short-term liquidity constraints and facilitating business growth trajectories. Such utilization aligns with the overarching goal of microfinance in bolstering the operational capacities of businesses and promoting sustainable economic development.

In summation, the findings from the analysis of descriptive statistics and cross-tabulations resonate as a foundational pillar upon which the subsequent layers of analysis are constructed. These insights illuminate the diverse tapestry of businesses engaging with microfinance support services, shedding light on sectoral distribution, ownership dynamics, loan size disparities, and the targeted utilization of funds. This comprehensive understanding serves as a bedrock for the cumulative comprehension of microfinance's impact on business growth, which is further elucidated through subsequent analytical lenses.

### **5.1.2. Findings From Chi-Square and Correlation Analysis**

The application of chi-square and correlation analysis unveiled intricate connections between key variables, shedding light on the interplay of gender, business size, loan size, business performance, and growth perceptions. These findings offer a deeper understanding of the dynamics that underpin the relationships within the microfinance landscape.

The chi-square analysis yielded significant insights into the relationship between gender, business size, and loan size. The results underscored the prevailing trend that smaller businesses, particularly those owned by female entrepreneurs, tend to receive comparatively smaller microfinance loans. This outcome aligns with the broader narrative of financial inclusivity and highlights the potential challenges faced by women-led smaller enterprises in accessing adequate financial resources. The significant associations revealed by the chi-square analysis reinforce the need for targeted interventions to address disparities in loan allocation and enhance gender-equitable access to microfinance services.

Furthermore, the correlation analysis delved into the nuanced connections between loan size, business performance indicators, and growth perceptions. The findings illuminated multifaceted relationships that contribute to the intricate web of microfinance impact. The positive

correlation observed between loan size and specific business performance indicators suggests that larger loans might indeed facilitate improvements in certain operational aspects. This finding supports the idea that adequate financial resources can enhance business capacities, potentially leading to tangible growth outcomes.

Interestingly, the correlation analysis uncovered that perceptions of growth played a nuanced role in mediating the relationship between loan size and business performance. While loan size was positively correlated with some performance indicators, the influence of perceptions added complexity to this association. This suggests that the psychological dimension of growth perceptions interacts with objective performance metrics, shaping the overall outcomes experienced by microfinance recipients. The interplay between objective measures and subjective perceptions underscores the holistic nature of microfinance impact, encompassing both tangible and intangible dimensions of growth.

In summary, the chi-square and correlation analysis offer a deeper layer of understanding within the microfinance ecosystem. The significant associations between gender, business size, and loan size highlight the need for gender-sensitive approaches in microfinance interventions. The intricate relationships between loan size, business performance indicators, and growth perceptions emphasize the multidimensional nature of microfinance impact. These findings set the stage for a comprehensive analysis that considers both quantitative and qualitative aspects of business growth within the context of microfinance support services.

### **5.1.3. Findings From Multiple Regression Analysis**

The exploration of the intricate relationships between microfinance, growth perceptions, and business performance through multiple regression analysis revealed valuable insights into the multifaceted mechanisms at play within the microfinance landscape.

The results of the multiple regression analysis illuminated the interconnected influences of loan size, business performance, and microfinance on growth perceptions. Specifically, the analysis demonstrated that both loan size and business performance significantly impacted growth perceptions among business owners who accessed microfinance support services. This finding suggests a complex interplay between financial factors, operational outcomes, and the psychological dimensions of growth perceptions.

The relationship between loan size and growth perceptions underscores the role of microfinance in shaping entrepreneurs' outlooks. The positive association between loan size and growth perceptions implies that larger loans are linked to more optimistic perspectives on business

growth. This aligns with the notion that increased financial resources provided by microfinance can empower entrepreneurs, enabling them to envision and pursue more ambitious growth trajectories. The influence of loan size on growth perceptions reinforces the broader narrative of microfinance not only as a financial enabler but also as a catalyst for fostering positive aspirations among business owners.

Moreover, the multiple regression analysis highlighted the significance of business performance indicators in shaping growth perceptions. Specifically, revenue and profit emerged as notable contributors to entrepreneurs' perceptions of growth. This finding underscores the pivotal role of financial outcomes in shaping individuals' perceptions of business progress. It suggests that tangible improvements in revenue and profit resulting from microfinance interventions have a meaningful impact on how entrepreneurs perceive the growth trajectory of their businesses.

In summary, the multiple regression analysis provides a comprehensive perspective on the intricate relationships between microfinance, growth perceptions, and business performance. The results emphasize the dual nature of microfinance's impact – both in terms of providing tangible financial resources and shaping entrepreneurs' psychological outlooks. The findings underscore the interconnectedness of financial factors, operational outcomes, and psychological dimensions in driving holistic business growth within the microfinance context.

#### **5.1.4. Findings From Wilcoxon Signed-Rank Test Results**

The Wilcoxon Signed-Rank Test results constitute a crucial component of our comprehensive investigation into the tangible impacts of microfinance on various dimensions of business performance. While not all observed changes achieved statistical significance, collectively, they offer a nuanced and holistic understanding of the multifaceted influence that microfinance interventions wield on businesses' operational and financial aspects.

The outcomes of the Wilcoxon Signed-Rank Test unveiled a range of changes across key business performance indicators, shedding light on the tangible outcomes of engaging with microfinance support services. Notably, increases were observed in crucial domains such as revenue, profit, product diversification, and customer engagement. These upward shifts point towards the potential of microfinance in fostering growth and enhancement within businesses.

Accompanying these changes, variations in the standard deviation were observed, indicating the diverse nature of responses among businesses to microfinance interventions. This diversity underscores the adaptive capacity of businesses to leverage microfinance in distinct ways, leading to variations in outcomes. These nuanced fluctuations in standard deviation provide a valuable

insight into the customized and context-dependent nature of the impact of microfinance on various aspects of business performance.

The Wilcoxon Signed-Rank Test results also revealed significant improvements in business expenditure and employee numbers. These findings reinforce the transformative effects of microfinance interventions in facilitating business expansion and growth. The increased expenditure and augmented employee numbers signify the potential of microfinance to contribute to not only financial improvements but also operational enhancements, which collectively contribute to a comprehensive picture of business advancement.

In summary, the Wilcoxon Signed-Rank Test results contribute significantly to our understanding of the tangible impacts of microfinance interventions on diverse dimensions of business performance. While some changes were statistically significant, the collective narrative reflects the multifaceted and transformative nature of microfinance. These findings provide valuable insights for entrepreneurs, practitioners, and policymakers seeking to harness the potential of microfinance to foster sustainable business growth.

## **5.2. Conclusion**

The culmination of the diverse findings obtained through various analytical methods converges to provide a comprehensive comprehension of the intricate relationship between microfinance interventions and business growth. The synthesis of these outcomes uncovers an impact that is multifaceted, transcending the realm of mere financial improvements. The intricate interplay between loan size, perceptions, and performance indicators underscores the nuanced pathways through which microfinance molds the trajectories of businesses. Additionally, the significance of contextual elements such as business size, ownership structure, and sectoral distribution emphasizes the pivotal role of context in mediating the outcomes arising from microfinance endeavors.

The synthesis of these outcomes not only enriches our understanding of the intricate dynamics between microfinance and business growth but also sheds light on the broader implications of these findings. The multifaceted nature of the impact speaks to the holistic transformations that microfinance can instigate, going beyond the traditional metric of financial gain. This multifarious influence holds significance for entrepreneurs, practitioners, and policymakers as they chart strategies to stimulate sustainable business development.

The identification of nuanced connections between loan disbursement, entrepreneurial perceptions, and objective performance indicators underscores the complexity of the



microfinance-business nexus. This insight prompts us to consider microfinance as a catalyst not only for financial growth but also for shaping business strategies, motivations, and aspirations. Furthermore, the acknowledgment of the contextual dimensions that shape these outcomes serves as a reminder that microfinance interventions should be tailored to suit the distinctive characteristics and needs of different businesses.

In summation, this comprehensive exploration of diverse findings offers a comprehensive perspective on the intricate interplay between microfinance interventions and business growth. The synthesized insights underscore that the impact of microfinance is both intricate and multifaceted, with contextual factors exerting a substantial influence. As we conclude this study, it becomes evident that the landscape of microfinance and its influence on business growth is characterized by intricate connections, varied responses, and the multifarious tapestry of context.

### **5.3. Recommendations**

Based on the insights garnered from the comprehensive analysis, several recommendations emerge for stakeholders in microfinance and business development:

**Tailored Microfinance Programs:** Microfinance institutions should consider tailoring loan packages to suit the specific needs and growth aspirations of different businesses. Recognizing the influence of loan size on growth perceptions, customized loan structures can empower entrepreneurs to maximize the benefits of microfinance.

**Entrepreneurial Training:** Alongside financial support, providing targeted entrepreneurial training can enhance the capacity of businesses to effectively utilize microfinance funds. Equipping entrepreneurs with essential skills and knowledge can amplify the impact of microfinance interventions.

**Promotion of Gender-Inclusive Policies:** Given the correlation between gender, business size, and loan size, fostering gender-inclusive policies can ensure equitable access to microfinance for female entrepreneurs. Efforts to empower women-led businesses can contribute to more balanced and sustainable economic growth.

**Enhanced Monitoring and Evaluation:** Microfinance institutions and policymakers should institute robust monitoring and evaluation mechanisms to continuously assess the impact of microfinance interventions. Regular feedback loops can enable iterative improvements in program design and implementation.

**Support for Diversification Initiatives:** Acknowledging the positive influence of microfinance on product diversification, providing targeted support and resources for businesses aiming to expand their product portfolios can stimulate innovation and economic diversification.

**Long-Term Focus on Growth:** Rather than solely concentrating on short-term financial gains, microfinance programs should adopt a long-term perspective that nurtures sustainable business growth. This involves not only financial support but also fostering an enabling environment for entrepreneurship and innovation.

In conclusion, this study serves as a multifaceted exploration of the impact of microfinance interventions on business growth. The convergence of quantitative analyses and their nuanced interpretations unveils the multifarious ways in which microfinance shapes business trajectories. The recommendations put forth aim to guide policymakers, practitioners, and entrepreneurs towards harnessing the potential of microfinance as a catalyst for sustainable and inclusive economic development.

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**ANNEX 1: QUESTIONNAIRE SURVEY**  
**University of Padova**  
**Master of Arts in Local Development**  
**Italy/Veneto Region/Via 8 Febbraio, 2 -35122 Padova**

I appreciate your interest in participating in our questionnaire to measure the impact of microfinance on business growth. This interviewer-questionnaire is part of research undertaken in partial fulfilment of a Master of Arts in Local Development award from the University of Padova.

This questionnaire aims to assess microfinance's effectiveness in driving business growth for micro, small and medium-sized enterprises (MSMEs) in the Asanti-Akim Central Municipality of the Ashanti region of Ghana. Your responses will help understand how microfinance has impacted your business growth and identify areas where Microfinance Institutions (MFIs) can improve their services.

This information is principally sought for academic purposes only; therefore, your responses will remain confidential and will only be used for research purposes. Please answer the following questions to the best of your ability based on your experience with microfinance. Your cooperation and support are immensely beneficial to the study and will be appreciated.

**A. Respondent's demographic information of the business owner**

1. Gender: Male  Female
2. Age.....
3. Level of education: No education  Primary education  Secondary education   
Technical/Vocational Training  Tertiary education

**B. Business Characteristics**

4. Number of years that the business has been in existence.....
5. For how long have you been running a business (length of time in business)?.....
6. How many employees do you have? 1 to 5  6 to 10  11 to 15  16-20  Over 21
7. What is the legal status of your business? Limited liability  Sole Ownership  Family enterprise  Partnership  other.....
8. Rate your level of knowledge about business management skills. 1. Very low  2. Low  3. Medium  4. High  5. Very high

**C. Accessing microfinance services**

9. How often do you seek microfinance assistance? 1. Very frequently  2. Occasionally  3. Rarely  4. Never
10. How do you rate the process of obtaining a loan?  
Very slow  Slow  Fast  Very Fast
11. Did you have to save with MFIs before obtaining the loan? Yes  No
12. If yes, how much did you have to save to qualify for a loan (in Ghana Cedis)?.....
13. How many months did you have to save to qualify for a loan (number of months)?.....
14. What was the reason for borrowing?.....



15. What is the loan amount you have received (in Ghana Cedis)?.....
16. What is the amount paid on the loan as interest (in Ghana Cedis)?.....
17. Rate your subjective view on the amount paid on loans as interest (reverse score). 1. Very high  2. High  3. Moderate  4. Low  5. Very low
18. Interest payments duration. Weekly  Bi-weekly  Monthly  Other.....
19. Rate your subjective view on the loan grace period for interest payments. 1. Very short  2. Short  3. Moderate  4. Long  5. Very long
20. How satisfied are you with the loan grace period for interest payments? 1. Extremely dissatisfied  2. Slightly dissatisfied  3. Neither satisfied nor dissatisfied  4. Very satisfied  5. Extremely satisfied
21. Have you taken up a loan to pay your interest? Yes  No
22. What form of microfinance services have you received? Loan  Advisory services  Business training  Technical assistance  Monitoring  Insurance  Mentoring  Savings  Others, specify .....
23. How satisfied are you with the microfinance services provided?. 1. Extremely dissatisfied  2. Slightly dissatisfied  3. Neither satisfied nor dissatisfied  4. Very satisfied  5. Extremely satisfied
24. Would you recommend microfinance to other MSMEs? Yes  No  Not sure
25. What challenges did you encounter when applying for microfinance services?.....
26. What can be done to eliminate such challenges?.....

**D. Impact of microfinance on business performance?**

27. Indicate whether accessing microfinance services impacted production activities contributing to improved business growth. 1. Strongly Disagree  2. Disagree  3. Neither Agree nor Disagree  4. Agree  5. Strongly Agree
28. Provide the average monthly records (in Ghana Cedis) for the under-listed business performance metrics before and after receiving microfinance services.

<b>Business KPIs</b>	<b>Before (microfinance support services)</b>	<b>After (microfinance support services)</b>
Sales		
Revenue		
Profit		
Savings		
Business expenditure (e.g., utilities)		
Employees (a proxy for the size of the business)		

29. For the following questions, select the answer that most closely matches your experience

<b>Business Performance Areas</b>	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
Microfinance has provided me with access to capital that I would not have been able to obtain otherwise.					
Microfinance has helped me to improve my business skills and knowledge.					
Microfinance has enabled me to expand my business and increase my profits.					
Microfinance has helped me to create employment opportunities for others.					
Microfinance has improved my access to other financial services, such as savings and insurance.					
Microfinance has increased my confidence and self-esteem as a business owner.					
Has microfinance helped increase your business's revenue?					
Has microfinance helped increase your business's savings?					
Has microfinance helped increase your business's profit?					
Has microfinance helped increase your business's sales?					
Has microfinance helped increase the number of employees?					

30. What do you think would have happened to your business without microfinance services?  
 Collapsed  No change  Better

Thank you for taking the time to complete this questionnaire. Your input will be confidential and used solely for academic. Thank you again for your time and feedback. If you have further suggestions or comments, please do not hesitate to contact us.

## **ANNEX 2: INTERVIEW GUIDE FOR MICROFINANCE INSTITUTIONS**

**University of Padova**

**Master of Arts in Local Development**

**Italy/Veneto Region/Via 8 Febbraio, 2 -35122 Padova**

As the global economy continues evolving, micro, small and medium-scale enterprises (MSMEs) are increasingly recognised as critical growth and job creation engines. However, many MSMEs face significant barriers to accessing finance, which can limit their ability to expand and succeed. Microfinance services have emerged as an essential tool for addressing this challenge, providing small-scale loans and other financial services to entrepreneurs and business owners who may not have access to traditional banking channels.

This interview guide is part of research designed to explore how microfinance services support MSMEs and gain insight into the strategies and practices that can help maximise their impact in the Asanti-Akim Central Municipality of the Ashanti region of Ghana. By examining the experiences of microfinance practitioners and their clients, the research aims to understand better microfinance's role in promoting entrepreneurship and economic development.

This information is principally sought for academic purposes only; therefore, your responses will remain confidential and only be used for research purposes. Please answer the following questions to the best of your ability based on your experience with microfinance. Your cooperation and support are immensely beneficial to the study and will be appreciated.

### **A. Introduction**

1. Can you tell me about your role and responsibilities within the microfinance organisation?
2. How long has the organisation provided services to micro, small, and medium-scale enterprises?
3. Who are your typical clients, and what are their most common financial needs?
4. How do you identify potential clients and assess their creditworthiness?
5. How do you ensure the services are tailored to each client's unique needs?

### **B. Microfinance Services**

6. Describe your organisation's microfinance services to micro, small, and medium-scale enterprises?
7. Can you describe the process of accessing these services?
8. How do you determine the loan size and interest rates charged for these services?
9. What is the repayment process like for micro, small, and medium-scale enterprise loans?
10. How do you ensure that micro, small, and medium-scale enterprises use the loans for their intended purpose?
11. What financial education and support do you offer clients?
12. How do you help clients improve their financial literacy and make informed financial decisions?
13. Can you tell me any additional services your organisation provides to micro, small, and medium-scale enterprises beyond loans?

### **C. Eligibility and Application**

14. What are the eligibility criteria for micro, small, and medium-scale enterprises to access your organisation's services?

15. How does your organisation verify the information micro, small, and medium-scale enterprises provide during the application process?
16. Can you walk me through the application process for micro, small, and medium-scale enterprises?

**D. Impact Assessment**

11. How does your organisation measure the impact of your microfinance services on micro, small, and medium-scale enterprises?
12. Can you provide any specific examples of how your organisation has positively impacted the business operations of micro, small, and medium-scale enterprises?
13. How do you use client feedback to improve your services?

**E. Challenges and Opportunities**

14. What challenges does your organisation face in providing services to micro, small, and medium-scale enterprises?
15. How does your organisation address these challenges?
16. What opportunities do you see for expanding your organisation's services to micro, small, and medium-scale enterprises in the future?

**F. Conclusion**

16. Is there anything else you would like to share about your organisation's services for micro, small, and medium-scale enterprises?
17. How can interested micro, small, and medium-scale enterprises access your organisation's services?

## ANNEX 3: LIST OF TABLES

### ANNEX TABLE 1 (Table: 4)

	N	Mean	Median	St. Dev.	Skewness	Minimum	Maximum
Years of business existence	180	7.76	7.00	3.377	1.973	4	22
Number of employees	180	2.18	2.00	1.154	.595	1	5

Source: Author's Construct, 2023; based on Field Survey Data

### ANNEX TABLE 2 (Table: 5)

	N	Mean	Median	St. Dev.	Skewness	Minimum	Maximum
Latest loan amount received (in Ghana Cedis)	180	3098.9	3000.00	1079.933	.699	1000	7500
Amount paid as interest on the loan	180	520.68	410.00	341.101	1.058	120	1400

Source: Author's Construct, 2023; based on Field Survey Data

### ANNEX TABLE 3 (Table: 6)

Variables	Categories	Total N (%)	Perceived impact of microfinance on business growth				
			Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
<b>Effects of microfinance on business performance</b>							
Microfinance associated risks (Reverse score)	Very high risk	42 (23.3)	22 (81.5)	13 (23.6)	5 (7.9)	2 (7.7)	0 (0)
	Somewhat high risk	69 (38.3)	2 (7.4)	22 (40.0)	39 (61.9)	5 (19.2)	1 (11.1)
	Neutral	50 (27.8)	3 (11.1)	19 (34.5)	14 (22.2)	10 (38.5)	4 (44.4)
	Low risk	12 (6.7)	0 (0)	1 (1.8)	5 (7.9)	5 (19.2)	1 (11.1)
	Very low risk	7 (3.9)	0 (0)	0 (0)	0 (0)	4 (15.4)	3 (33.3)
Accessing microfinance in the	Very unconfident	29 (16.1)	16 (59.3)	9 (16.4)	4 (6.3)	0 (0)	0 (0)
	Somewhat	54 (30.0)	5 (18.5)	25 (45.5)	16 (25.4)	6 (23.1)	2 (22.2)

Variables	Categories	Total <i>N</i> (%)	Perceived impact of microfinance on business growth				
			Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
future	unconfident						
	Neutral	68 (37.8)	6 (22.2)	20 (36.4)	34 (54.0)	5 (19.2)	3 (33.3)
	Somewhat confident	24 (13.3)	0 (0)	1 (1.8)	9 (14.3)	12 (46.2)	2 (22.2)
	Very confident	5 (2.8)	0 (0)	0 (0)	0 (0)	3 (11.5)	2 (22.2)

Source: Author's Construct, 2023; based on Field Survey Data