MICROLENDING SERVICES AND FINANCIAL PERFORMANCE OF SMALL AND MEDIUM MANUFACTURING ENTERPRISES IN NAIROBI COUNTY, KENYA
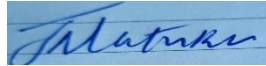
JOEL MUTUKU MULWA

A RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF MASTER OF BUSINESS ADMINISTRATION, FACULTY OF BUSINESS AND MANAGEMENT SCIENCES, UNIVERSITY OF NAIROBI

2022

DECLARATION

I declare that this is my original work and has not been presented for an award in any other university or institution of higher learning.

Signature: ~~Mutuku~~   Date: 17th November, 2022

Joel Mutuku Mulwa

D61/36488/2020

This research project has been submitted for examination with my approval as the University supervisor

Signature   ~~Busienei~~   Date 17th November, 2022

Mr Peter K. Busienei

Lecturer, Department of Finance and Accounting

Faculty of Business and Management Sciences

University of Nairobi

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DEDICATION

I dedicate this research project to my Wife Regina, Children; Mercy, Abigail, Purity and Jason, my parents Daniel and Martha and work supervisor Mr Willy for their prayers and never-ending support they have all given me during the period.

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ABBREVIATIONS AND ACRONYMS

GDP   Gross Domestic Product

KAM   Kenya Association of Manufacturers

KEBS   Kenya Bureau of Standards

MFI   Microfinance Institution

NGO   Non-Governmental Organization

ROA   Return on Assets

ROE   Return on Equity

ROI   Return on Investment

ROS   Return on Sales

SACCO   Savings and Credit Cooperatives

SMEs   Small and Medium Enterprises

ABSTRACT

Microlending services has been acknowledged as an essential instrument for the underbanked, particularly micro, small and medium enterprises (SMEs), to better their economic standing, profitability and growth. The research objective was to establish the effect of microlending on the performance of SMEs in the manufacturing sector in Nairobi County, Kenya. Specifically, the study determined the effect of microcredit services, micro saving services, microinsurance and microfinance training services on performance of manufacturing SMEs in Nairobi County, Kenya. This study was based on the delegated monitoring theory and microfinance theory. The research adopted a descriptive research design. The population of the research was 141 SMEs that engaged in manufacturing activities in Nairobi County, Kenya and were members of Kenya association of manufacturers (KAM). This study was a census. This design was selected because the population of 141 manufacturing SMEs in Nairobi County was accessible and small. A structured questionnaire was applied to gather data. The drop-and-pick-later method was adopted in administering the questionnaire. The analysis of data entailed applying both descriptive analysis and inferential analysis techniques. Frequencies, means, percentages and standard deviations were the descriptive analysis measures that were used. The study also applied multiple linear regression. Results were presented in figures and tables. The study findings indiacted that performance of manufacturing SMEs was positively and significantly affected by micro credit ($\beta = 0.725$, $p < 0.05$). The research findings also determined that the performance of manufacturing SMEs was significantly influenced by micro savings ($\beta = 0.460$, $p < 0.05$). Additionally, the study results determined that micro insurance had a significant positive effect on performance of manufacturing SMEs ($\beta = 0.258$, $p = 0.015$). The results of the research also indiacted that microfinance training did not have a significant influence on performance of manufacturing SMEs ($\beta = 0.173$, $p = 0.135$). The study recommends to manufacturing SMEs to seek microcredit services from MFIs to empower them to take advantage of profitable investment prospects. The study also recommends to manufacturing SMEs to enhance their saving culture by opening accounts in various MFIs. Moreover, MFIs should act as effective delegated monitors and provide valuable advice to manufacturing SMEs regarding savings and other microlending services that the MFIs have that can be suitable for the SMEs. Regarding microinsurance, the study recommends to manufacturing SMEs to take microinsurance to cover their valuable assets against risks such as theft, and fire. The study also recommends to SMEs to take up microfinance training services for all their staff that deal with finance and related matters.

CHAPTER ONE: INTRODUCTION

1.1 Background to the Study

Microlending service has been acknowledged as an essential instrument for the underbanked, particularly micro, small and medium enterprises (SMEs), to better their economic standing, profitability and growth (Baquero, Hamadi, & Heinen, 2018). The presence of microlending services such as micro savings accounts, emergency loans, flexible micro credit, microfinance training services, and financial coaching and mentoring is vital for SMEs as they are grossly excluded from the conventional financial system. Flexible loans suited to the context of the SMEs, access to micro saving and micro insurance products, and access to financial training coaching and mentoring may help SMEs enhance their revenues, financial performance, and have capacity for growth and management financial risks adequately (Cull, Demirgüç-Kunt, & Morduch, 2018). Besides, Baruah and Bezbaruah (2020) posit that this also enhances their capacity to manage working capital requirements by allowing them to save and borrow at various periods as needed.

The current study was based on the delegated monitoring theory and microfinance theory. According to the delegated monitoring theory by Diamond (1984), financial institutions may function as delegated monitors for net savers and pool the funds together and provide loans and other services to deserving cases. This ensures that deficit units who want money for investments will have access to these funds and invest them for the net gain of the individual and the economic system. The microfinance theory, on the other hand advocates for provision of micro lending and other services to small business that are excluded from the mainstream financial system (Yunus, 1989). These microfinance services enable the

underbanked SMEs to finance their operations, and take growth opportunities for their performance and sustainability.

Globally, SMEs are the main drivers of economic growth, job creation and poverty alleviation (Sommer, 2022). The relative significance of the SME sector varies substantially across nations, as SMEs have been known to contribute significantly to the economy, whether in developed or developing countries (Ayyagari, Demirguc-Kunt, & Maksimovic, 2014). SMEs in developing nations create over 70% of employment in formal markets. They are also well-known for alleviating poverty by enhancing national productivity, innovation and social mobility. Nonetheless, these institutions have several obstacles, particularly those in developing countries such as Kenya. Kenya Association of Manufacturers (2021) posit that SMEs in the manufacturing sector face several challenges including product, supply and management of raw materials, and policy, regulatory and business environment. Other challenges include access to markets, access to technology, and access to affordable finance. For a long time, SMEs in the manufacturing sector have experienced challenges when accessing finance and thus, the role of microlending in bridging this financing gap is vital. Thus, this research sought to establish the influence of microlending on performance of manufacturing SMEs in Nairobi County, Kenya.

1.1.1 Financial Performance of Small and Medium Manufacturing Enterprises

Financial performance is defined by Semegn and Bishnoi (2021) as the efficiency with which a company utilizes its resources to generate income. Financial performance thus reflects a firm's going concern, and health and it is also applied in comparing businesses in

the same industry (Muema & Wamugo, 2019). A study by Onduart and Ondabu (2021) established that only 31% of SMEs consistently report profits. Firms are primarily concerned with their financial performance because it is a primary motivator for companies to engage in business. Companies that consistently make losses will eventually become bankrupt. For SMEs, sustainability is a big challenge as most of them struggle to make profits.

Many SMEs rely only on previous and current financial performance to determine how well they are doing, but many also look at the success of other SMEs in the same industry (Singh et al., 2022). Various measures are often employed as proxies for financial performance and they encompass return on investment (ROI), return on assets (ROA), net profit, gross profit, sales growth, return on sales (ROS), and return on equity (ROE) (Semegn & Bishnoi, 2021). The ratio measures of performance such as ROA and ROE are mostly preferred since they can be used to compare financial performance of different SMEs (Onduart & Ondabu, 2021). The capacity of the SME to produce surplus with its existing assets is indicated by ROA. On the other hand, ROE is calculated by dividing net profit by the equity of the SME. The financial performance of SMEs was assessed using ROA in this research.

1.1.2 Microlending Services
Microlending services entail providing low-income organizations and individuals with small, low-interest loans and related services (Baquero et al., 2018). These micro loans are usually accompanied with financial training, coaching, mentoring, micro insurance, micro

saving, monitoring and other related services to ensure that the provided micro loans are appropriately applied to the preplanned purpose (Vanroose & D'Espallier, 2013). The organizations that provide microlending and other associated services include conventional commercial banks, microfinance banks, microfinance institutions, and recently, financial technology (FinTech) firms (Singh, Sarangal, & Singh, 2022). With the advent of mobile banking, most microloans and related services are provided through mobile phone technology which has enabled electronic application, approval and receipt of the microloans(Baruah & Bezbaruah, 2020). Microlending and microfinance firms provide an avenue for SMEs to obtain funds, which include very small savings, micro leasing, and micro insurance, all of which assist extremely vulnerable entrepreneurs establishing and growing their businesses.

There are a variety of services provided in microlending which comprise of credit, savings, insurance, advisory, training, mentoring, and monitoring (Jalil, 2021). These microlending services are provided by a variety of organizations including savings and credit cooperatives (SACCOs), commercial banks, microfinance banks, microfinance institutions (MFIs), and non-governmental organizations (NGOs). Microlending services differ from traditional lending as the amount borrowed has a short payback term, generally less than a year, and is repaid weekly or other shorter time repayments to lessen the risk of default among low-income borrowers and high-risk SMEs (Baraton & Léon, 2021). Besides, the borrowed money is disbursed quickly by the lender, and thus, the loan application procedure is less time-consuming and less difficult (Cull et al., 2018). Before advancing the loan, financial training is usually provided and later, services such as micro saving,

monitoring, mentorship and coaching and micro insurance are provided to enhance the capacity of the SMEs to deal with growth and risks.

1.1.3 Microlending and Financial Performance

Microlending could affect the performance of SMEs when the SMEs use the accessed finance to enhance their operations, growth prospects and sales. SMEs face stiff competition from big, well-established organizations, and thus they have a difficult time breaking into the market (Onduart & Ondabu, 2021). The emergence of microlending have provided a lifeline to SMEs and has enabled them to meet their working capital needs and take growth opportunities which have largely resulted to their improved performance. Microlending has enabled SMEs to improve their performance by encouraging them to save money, which they may then use to borrow according to their needs (Hermes, Lensink, & Meesters, 2011). Besides, provision of value-added services such as financial training, micro insurance, mentoring and coaching enables managers or owners of SMEs to have the capacity to improve financial performance and growth of their businesses.

Microlending services provided by various organizations has been proven in various studies to be vital for financial performance of SMEs. However, Sommer (2022) established that microlending can have unintended consequences by impoverishing SMEs and making them overindebted. This was however contradicted by findings from a study by Semegn and Bishnoi (2021) who determined that microlending plays an instrumental role in enabling SMEs to enhance their performance. Further, Kihara (2017) determined that microlending services such as microcredit, micro saving, micro insurance and financial

training services offered by microfinance institutions were pivotal towards enabling SMEs to grow and compete in the market. These findings were supported by Omwono and Hakizimana (2019) who determined that microcredit offered by MFIs was vital in enhancing financial performance of SMEs through enabling them to finance working capital.

1.1.4 Manufacturing SMEs in Nairobi County

SMEs play a crucial role in global economic growth and also in producing and sustaining equitable economic and social development. They serve as centers for employment creation, poverty reduction, market-based economic development, and democratization in emerging nations. The role played by SMEs in job creation and gross domestic product (GDP) varies depending on the country. For example, in underdeveloped nations, they contribute less than 10% of GDP, but in advanced ones, they contribute more than 50% (Baruah & Bezbaruah, 2020). In developing nations, the contribution of SMEs is roughly 33% of GDP and 45% of total jobs. According to Wakiaga (2022), Kenya's SMEs constitute 98% of all businesses, employ around 30% of the nation's overall workforce and produce three percent of the GDP of the country. The majority of small businesses are self-funded or supported through informal sources such as family or friends.

SMEs in the manufacturing sector in Kenya are vital in enhancing the manufacturing sector's contribution towards the country's GDP. Due to their contribution to job creation, innovation and economic development, this implies that SMEs must get a lot more attention if the manufacturing industry is to develop (Kenya Association of Manufacturers - KAM, 2021). SMEs in manufacturing sector constitute 93% of all the firms in the sector

are majorly engaged in beverages, mining, information and communications technology (ICT), textiles, leather and hides, pharmaceuticals, agro-processing, furniture, construction materials, and iron and steel (British Chamber of Commerce, 2020). Though some manufacturing SMEs are making significant progress in the economy, most are struggling with financial performance, growth and sustainability due to the various challenges they face (KAM, 2018). This study will be on manufacturing SMEs that are based in Nairobi County, Kenya, which harbors most of them.

1.2 Statement of the Problem

Microlending services are critical to economic progress of a nation as well as financial performance and sustainability of SMEs which are mostly excluded from conventional financial system (Baraton & Léon, 2021). Microlending enables SMEs to access financial services such as savings, financial training, mentoring, coaching, financial monitoring, micro insurance and flexible microcredit which they can use for growth, financial performance and sustainability (Baruah & Bezbaruah, 2020). One of the key challenges that are faced by SMEs is access to finance and thus, microlending by conventional commercial banks, MFIs and Fintech firms are necessary to bridge the funding gap (Singh et al., 2022). SMEs can apply these microlending services to finance their working capital, operations, and take economic opportunities which can enhance their financial performance, growth and sustainability.

One of the greatest challenges for SMEs is access to capital (Semegn & Bishnoi, 2021). The provision of financial services to SMEs is critical for increased productivity and

resource mobilization. In Kenya, the growth of manufacturing SMEs is a critical component of the country's industrial strategy, since it contributes to the economy's structural shift from agriculture to industry (Kenya Association of Manufacturers, 2021). However, the development of manufacturing SMEs is impeded by lack of access to funding as the majority manufacturing and processing SMEs do not have appropriate access to finance. Jesselyn (2019) observes that, to deal with this challenge, microfinance service providers and Fintech firms should provide suitable microlending solutions to enable the manufacturing SMEs to enhance their profitability and growth.

There are various studies conducted linking microlending to financial performance of SMEs but they have left various knowledge gaps. A study in Malaysia by Jalil (2021) established that access to microcredit from Fintech organizations positively influence financial performance of SMEs. This research had some contextual gaps as it was undertaken in Malaysia and the findings may not be generalizable to the Kenyan context. A study in Rwanda by Omwono and Hakizimana (2019) determined that microfinance credit significantly affected the SMEs' performance. This study however, had some conceptual gaps because it did not include microfinance training, micro insurance and micro savings. In Kenya, a study by Onduart and Ondabu (2021) revealed that performance of youth owned SMEs in Nairobi County was positively affected by MFI training, savings and loans. This study left some conceptual and contextual gaps as it only considered youth owned SMEs and did not encompass micro insurance as a study variable. Another study by Omondi and Jagongo (2018) in Kisumu County, Kenya, established that access to microcredit, microfinance training, and savings mobilization had a significant effect on the

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financial performance of SMEs. The research however, had some contextual gaps as it was undertaken in Kisumu County which has a different business environment with Nairobi County. Furthermore, a study by Kihara (2017) in Nairobi County explored the effect of microlending on SMEs' performance. The research established no significant influence of microlending and micro saving on SMEs' financial profitability. However, the study determined that microfinance training and microinsurance had a significant positive influence on profitability of SMEs. The research however, left a contextual gap as it incorporated all SMEs and did not single out manufacturing SMEs like in the current study. The current research sought to bridge these knowledge gaps by answering the question; what is the influence of microlending on financial performance of manufacturing SMEs in Nairobi County, Kenya?

1.3 Purpose of the Study

The purpose of the study was to establish the influence of microlending services on financial performance of small and medium manufacturing enterprises in Nairobi County, Kenya.

1.4 Research Objectives

The objectives of the study sought to;

i) To establish the influence of microcredit services on financial performance of small and medium manufacturing enterprises in Nairobi County, Kenya.

ii) To examine the influence of micro saving services on financial performance of small and medium manufacturing enterprises in Nairobi County, Kenya.

iii) To assess the influence of microinsurance on financial performance of small and medium manufacturing enterprises in Nairobi County, Kenya.

iv) To examine the influence of micro finance training services on financial performance of small and medium manufacturing enterprises in Nairobi County, Kenya.

1.5 Research Questions

The study answers the following research questions;

i) What is the influence of microcredit services on financial performance of small and medium manufacturing enterprises in Nairobi County, Kenya?

ii) How does micro saving services influence financial performance of small and medium manufacturing enterprises in Nairobi County, Kenya?

iii) What is the influence of microinsurance on financial performance of small and medium manufacturing enterprises in Nairobi County, Kenya?

iv) How does microfinance training services influence financial performance of small and medium manufacturing enterprises in Nairobi County, Kenya?

1.6 Significance of the Study

The study's results should provide evidence that is beneficial for policy formulation, theory, and practice. Government agencies and other policy making organizations such as KAM, Kenya Bureau of Standards (KEBS), SACCO Societies Regulatory Authority (SASRA), Central Bank of Kenya, Kenya Private Sector Alliance, and ministry of industrialization and enterprise development would be able to utilize the results from this study to strengthen

regulations and policies addressing microlending to SMEs in the manufacturing sector. These policymakers can use the findings to get insights into the status of microlending to the SMEs in the manufacturing sector, and how it influences their financial performance formulate new policies that would stimulate lending to the sector.

The research will also make a significant theoretical contribution to the extant literature on microlending to SMEs in the manufacturing sector, and the financial performance of SMEs. In addition, SMEs in other economic sectors stand to gain a great deal from the results of this study, as they will have deeper insights regarding the value of microlending. Moreover, Commercial banks and other microlending institutions will gain insights from the study that will enable them to develop new lending products that would fit the needs of the SMEs.

In addition to providing insights to management on how microlending influences profitability of SMEs in the manufacturing sector, the research results will also provide recommendations on how microlending can be utilized to enhance financial performance. The results of this study will also be of great value towards the management of SMEs in the manufacturing sector in Kenya, since they will provide insights on the impact of microlending on profitability of SMEs in the manufacturing sector. This will increase their knowledge as they seek the ultimate objective of maintaining the viability and expansion of their SMEs while maximizing shareholder value.

1.7 Delimitations of the Study

The research's main objective was to determine the influence of microlending on profitability of manufacturing SMEs in Nairobi County, Kenya. The study was conducted in Nairobi County, Kenya, since it had the most small and medium manufacturing enterprises. Though there were numerous microlending services provided by financial institutions to SMEs, the independent variables considered in this study were microcredit services, microfinance training services, micro saving services, and microinsurance. The dependent variable was financial performance.

1.8 Limitation of the Study

The study experienced some challenges which were mitigated as much as possible to ensure that they did not compromise the quality of the study. First, the study was challenged in arranging time with the research participants who were chosen for data collection since they were busy finance professionals who were often quite busy with their work in the SMEs. The researcher addressed this challenge by organizing data collection in periods or times that the finance professionals were not very busy such as in the evenings and lunch breaks. In order to provide respondents enough time to provide the necessary information, the researcher also used the drop-and-pick-later approach to administer the questionnaires so that the targeted research participants would respond to them at their convenience.

The research participants were reluctant to divulge information to the researcher because they were wary of how the information they provided would be applied. In order to get the necessary support for data collecting from the research participants, the study sought

assistance and permission from top management of the SMEs. To get their permission to enable distribution of questionnaires in order to gather enough data for the study, the researcher planned meetings with key executives of the SMEs and explained to them the purpose of the study, how the data collected would be used and how privacy, anonymity and confidentiality would be ensured. Moreover, to encourage the research participants to provide the requisite information, they were provided with an introductory letter from the university and the requisite permits.

The study also faced the limitation of getting biased or untruthful information from the study participants. To mitigate this limitation, the researcher expressly requested the study participants to provide objective and accurate information. The researcher also assured the respondents that their identities would be concealed since neither their names nor any other identifying information would be included in the questionnaires. This was essential in persuading the research participants to provide accurate, truthful, and pertinent information. The research participants were also assured by the researcher that the information they provided would only be utilized for scholarly reasons.

1.9 Assumptions of the Study

This research was undertaken on the assumption that the respondents would provide truth, verifiable and objective information regarding microlending and profitability of the manufacturing SMEs. The research was also conducted under the assumption that the effect of microlending on profitability of manufacturing SMEs in Nairobi County, Kenya was unknown. Moreover, the study assumed that the study participants selected to partake in

the research would show no bias and would be representative of all the manufacturing SMEs in Nairobi County.

1.10 Definition of Significant Terms Used in the Study

Financial Performance: The efficiency with which a company utilizes its resources to generate income. Financial performance thus reflects a firm's health as well as its future, and it is also applied to compare businesses in the same sector (Semegn & Bishnoi, 2021).

Micro saving: A service where an account in a financial organization is opened to enable low income earners or small businesses with low revenue to make small savings regularly (Baruah & Bezbaruah, 2020).

Microcredit: Provision of very small loans to low-income borrowers who generally lack stable cashflows, revenues, collateral, or a credit history that can be verified (Yusgiantoro, Simanjuntak, Wirdiyanti, Pratomo, & Sugeng, 2019).

Microinsurance: The protection against certain risks for low-income businesses or persons in return for small recurrent premium payments equal to the probability and expense of the risks involved (Hermes et al., 2011).

Microlending: Financial services such as micro saving, microinsurance, microcredit, and financial training aimed towards people or small firms without access to traditional financial services (Onduart & Ondabu, 2021).

Small and medium manufacturing enterprise: These are firms with 10-99 employees and which engage in the transformation of raw materials or component into finished products using equipment, tools, chemicals or labor (British Chamber of Commerce, 2020).

1.11 Organizational of the Study

There are five chapters in this research project. Introduction, study background, issue problem statement, study purpose, objectives of the research and research questions are all covered in chapter one. Additionally, chapter one also includes the study's value, its scope, its assumptions, its limitations, and the definition of key words and terms. The review of pertinent literature is presented in Chapter 2. This entails a review of prior research in accordance with microlending and financial performance of SMEs. The theoretical foundation, a synopsis of the literature review, conceptual framework, and research gaps are all included in this chapter. The methodology adopted in this study is presented in Chapter 3. The study design, study population, sampling strategy, sample size, instrument validity and reliability, data gathering, and process of data analysis are also covered in this chapter. Chapter four provides the data analysis, findings and discussion of results while chapter five provides a summary of the study, conclusions, and recommendations.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

The theoretical review, the influence of micro lending on performance of enterprises, and the review of empirical studies on the study subject are provided in this chapter. Besides, the chapter offers a summary of the literature and a review of the research gaps that justified the current study.

2.2 Financial performance of Small and Medium Manufacturing Enterprises

Though these microlending services are hypothesized to influence financial performance of SMEs, there are other aspects that can affect profitability of SMEs. These include corporate governance, management efficiency, and innovativeness. Accountability, openness, and credibility are all aspects of corporate governance, as is the capacity to set up effective channels for disclosing information in a way that promotes excellent company performance (Omwenga, 2017). SMEs may employ the essential resources it offers to help their competitive survival and expansion. To ensure sustainable performance, SMEs must be run according to a set of guiding principles and have faith that particular tools and solutions will change as their businesses expand. The vast amount of data demonstrates that well-governed SMEs exhibit noticeably superior long-term financial success and develop more quickly and sustainably (Abor & Adjasi, 2022). SMEs may utilize greater governance as a primary value proposition to draw in investors. Private equity and venture funds, among other risk capital providers for SMEs, are aware that effective governance increases security and improves return on investment (Rehman et al., 2019).

Management efficiency which is the output of the organizations management in relation to resources available to them can also influence financial performance (Barus, Muturi, Kibati, & Koima, 2017). Management efficiency can be indicated by the effectiveness of the management in managing risk and control, liquidity, assets, safety of employees and their capacity to invest in information technology. Moreover, the efficiency of management can be indicated by growth sustainability, resource mobilization, income growth, and efficiency in management of costs. The financial performance of an SME is determined by how well financial management choices are made. Management efficiency in managing finances entails resource mobilization, the use of those resources, working capital management, application of resources in investment projects, and management of capital structure (Njenga & Jagongo, 2019).

All businesses now rely heavily on innovation to achieve a competitive advantage in the marketplace. Financial performance of SMEs impacted by innovation since innovation enable the SME to provide innovative and new products to the market for increased sales revenue and profitability. Besides, innovation enables SMES to provide products and services that clients in the market want and thus enabling them to capture a wider market share. Today's competitiveness in the market and financial performance is embodied by innovation, which is supported by high norms in speed, efficiency, quality, creativity and adaptability (Donkor, Donkor, Kankam-Kwarteng, & Aidoo, 2018). SMEs may use innovation to significantly contribute towards determining the future of their businesses. High-performing innovators may dependably bring new, high-quality goods to market more often, quicker, and at a lower cost than rivals by maintaining high creativity and a

culture of continuous improvement (Makhdoom, Li, & Asim, 2019). Additionally, these businesses employ technique and framework innovation to further improve their products and raise the value to customers, thus increasing their financial performance.

2.3 Microlending Services and Financial Performance of Small and Medium Manufacturing Enterprises

When SMEs utilize the microlending services, they are enabled to improve their operations, chances for development, and sales, and thus microlending may have an impact on how well the businesses operate. SMEs find it challenging to enter new markets due to the fierce rivalry from large, established companies (Onduart & Ondabu, 2021). The majority of commercial banks avoid SMEs when they need financial services because of their significant risks, endangering their operations and viability (Muema & Wamugo, 2019). The introduction of microlending has given SMEs a lifeline and made it possible for them to fulfill their working capital requirements and take advantage of expansion prospects, both of which have significantly enhanced their performance. By encouraging SMEs to conserve money, which they can later utilize to borrow money as needed, microlending has helped SMEs perform better (Hermes, Lensink, & Meesters, 2011). Furthermore, managers or owners of SMEs are given the opportunity to improve the profitability and expansion of their businesses via the provision of value-added services including financial training, microinsurance, mentoring, and coaching.

Numerous studies have shown the importance of microlending services offered by different organizations for the performance of SMEs. However, Sommer (2022) shown that SMEs

might become overindebted and impoverished as a result of microlending, which can have unexpected repercussions. Findings from research by Semegn and Bishnoi (2021) showed microlending plays a crucial role in helping SMEs to grow, improve their performance, and play their economic function of development, innovation, and job creation, however, were in opposition to this. Furthermore, Kihara (2017) found that microlending services provided by microfinance institutions, such as microcredit, microsaving, microinsurance, and financial training services, were crucial for helping SMEs to develop and compete in the market. Omwono and Hakizimana (2019), who found that microcredit provided by MFIs was essential in improving the profitability of SMEs by allowing them to fund working capital, confirmed these results.

2.3.1 Microcredit Services and Financial `Performance of Small and Medium Manufacturing Enterprises

In Indonesia, Yusgiantoro, Simanjuntak, Wirdiyanti, Pratomo, and Sugeng (2019) investigated the influence of government's microcredit program on the growth of SMEs in terms of profit, revenue, and financial inclusion. The study population was SMEs in Jakarta Indonesia while a sample of 250 SMEs were incorporated in the research which was conducted through a questionnaire survey. The study found substantial variances between the enterprises that utilized microcredit and those that did not utilize microcredit, with the former group experiencing higher profits and turnover than the latter. Though these findings provide evidence on the influence of micro credit on profitability of SMEs, the study did not include other microfinance services such as micro insurance, training and micro insurance.

A study in Lebanon by Moussa (2020) investigated the relationship between the financial performance of SMEs and microcredits from MFIs. The study population was 17 SMEs in North Lebanon, where secondary data was gathered. The findings from ordinary least squares regression analysis conducted established that the profitability of the SMEs had a significant association with the number of microloans accessed. This research provided valuable empirical evidence on the influence of micro loans on financial performance of SMEs, but it left some contextual, conceptual and methodological gaps. The study was undertaken in Lebanon, whose economic context is different from Kenya. Besides, the study used only secondary data whereas both secondary and primary data were utilized in the current research. Further, the research only considered micro loans and did not incorporate other microlending aspects such as micro saving and micro insurance.

Ogah-Alo, Ikpor, and Eneje (2019) undertook time series research in Nigeria that took to assess how microlending influence profitability of SMEs. The research made use of regression analysis to analyze the secondary data that was gathered for the period 1992 to 2017. The study results determined that microlending through advances and loans has a beneficial effect on a number of performance metrics, including ROE, ROI, and net profit. On the other hand, it was discovered that overdraft facilities to SMEs had a negative effect on return on equity. These findings, however cannot be readily generalizable to SMEs in Kenya due to the contextual variances between Nigeria and Kenya. Besides, the study did not include other services such as training, micro saving and micro insurance which are important microlending services provided to SMEs by microfinance institutions.

2.3.2 Micro Saving Services and Financial Performance of Small and Medium Manufacturing Enterprises

MFIs provide micro saving programs that enable SMEs to meet their corporate goals, prepare for unforeseen events, continue to operate through periods of slow business, and create interest for the company, all of which help them perform better financially (Muema & Wamugo, 2019). In addition to offering microcredit, microinsurance, and micro savings services to SMEs, microfinance institutions often provide training services to these businesses. These training services help SMEs strengthen their skills in leadership, corporate growth, marketing, and financial management, giving them the chance to expand and improve their financial performance (Onduart & Ondabu, 2021).

A study in Tanzania by Mnunka (2018) evaluated the impact of microfinance on Tanzanian SMEs' financial performance. The study's specific goal was to ascertain the impact of micro savings on the profitability of SMEs. The research adopted a descriptive research design. The sample size for the study was 356 SMEs that operated in the Ilala Municipality, while the target population consisted of the 3215 registered SMEs. Questionnaires were utilized as the data gathering approach. The research utilized primary data that was gathered through a self-administered survey that included closed-ended questions. The study determined that profitability of SMEs in Tanzania was impacted by micro savings among others microfinance services.

A study in Nairobi County, Kenya by Kihara (2017) investigated how the profitability of SMEs was affected by microfinance. A descriptive study design was applied by the

researcher and a sample of 234 study participants was chosen from the 2,340 SMEs operating in Nairobi County, Kenya. Secondary data from 2014 to 2016 was collected by utilizing a data collecting sheet. Multiple regression analysis was adopted to analyze the data that had been gathered. The study findings indicated that there is a positive but negligible association between micro savings and SME financial profitability. However, the study left a contextual gap as it included all SMEs in Nairobi County, whereas the current research only included manufacturing SMEs, and thus the findings and recommendations may be more actionable for the sector.

2.3.3 Microinsurance and Financial Performance of Small and Medium Manufacturing enterprises

Microlending is vital in enabling financial performance of manufacturing SMEs. Some of the vital microlending components include micro insurance. Due to a lack of collateral, and a poor credit history, high default risk and irregular and small incomes, microfinance provides microinsurance to SMEs to cover their risks. These insurance services are essential to cover risks that SMEs may have and also compensate them in case they suffer a loss (Semegn & Bishnoi, 2021). Micro insurance coverage offers protection from death, illness, dangers and fire and thus enabling continuity in the SMEs. The study by Kihara (2017) determined that microinsurance positively and significantly affected SME financial profitability.

A study in Ghana by Amoah and Mungai (2020) investigated the impact of microinsurance on the profitability of SMEs in the country's Sekondi-Takoradi region. The Schumpeter's

theory of innovation and the financial intermediation theory served as the study's foundations. With 260 SMEs in the Ghanaian city of Sekondi-Takoradi as its sample size, the study used an explanatory research approach. Data on microinsurance and financial performance was gathered from microfinance organizations and SME owners using a standardized questionnaire. Microinsurance had a favorable and considerable influence on profitability of SMEs, according to an analysis of the data gathered.

Omwansa (2015) observed that Kenyan SMEs are significant, as stated in Vision 2030. SMEs are recognized as a key enabler for reaching vision 2030. Thus, Omwansa (2015) investigated the effect of microfinance banks' products on the profitability of SMEs in Machakos town. Since the researcher gathered information through descriptions, a descriptive research design was applied. This kind of design was also beneficial for identifying factors and creating hypothetical situations. The sample size was 372 which was selected using a stratified random sampling approach. Secondary data was gathered using a secondary data collection sheet, while primary data was gathered by sending questionnaires to the managers and owners of the SMEs. Analysis of data was through inferential and descriptive statistics, whereas regression and correlation were also utilized to determine the strength of the association between microinsurance and SMEs' profitability. The research results determined a substantial positive association between the MFIs' microinsurance and the financial success of SMEs.

2.3.4 Microfinance Training Services and Financial Performance of Small and Medium Manufacturing Enterprises in Nairobi County, Nairobi

A study in Tanzania by Mnunka (2018) assessed the influence of microlending on the country's SMEs' financial performance. The research specifically sought to assess the influence of savings mobilization, credit facility provision, financial skill development on the financial performance of SMEs in Tanzania. The sample size was made up of 356 SMEs that operated in the Ilala Municipality and a descriptive research design was applied to undertake the study. The research utilized questionnaires as the primary data gathering tools. The research findings determined that access to financial skills training and mobilization of savings had significant influence of financial performance of SMEs. This research however, had some conceptual gaps as it did not incorporate micro insurance, and did not collect secondary data on financial performance.

In Machakos County, Kenya, Kisaka and Mwewa (2014) undertook a study that explored the influence of microcredit, training, and micro savings on the growth of SMEs. A survey design was applied in the research and structured questionnaires were utilized to collect data from 100 SMEs. The association between micro-savings, training, micro-credit, and growth of SMEs was examined using multiple regression analysis. The findings demonstrated that microcredit, and micro savings had positive association with growth of SMEs. However, training did not have a significant influence on growth of SMEs. This research had a conceptual gap as it did not incorporate micro insurance which was factored in in the current study. Besides, the study focused on SMES from all sectors whereas the

current study will only focus on manufacturing SMES and thus may provide more focused recommendations.

Mutuma and Omagwa (2019) noted that the financial performance of SMEs continues to be unstable and financial difficulties cause the majority of them to cease operations. They also noted that the financial performance of SMEs is impacted by microfinance services to the industry. However, the relationship between the two is still a subject for empirical research in Kenya, particularly in Meru County, where there is a dearth of data and where the authors conducted the study. The study purpose by Mutuma and Omagwa (2019) was to determine how microfinance services affected the profitability of SMEs. The research focused on 93 SME owners and managers who were included as the sample size. A questionnaire was used to obtain the data. Data were analyzed using multiple regression analysis and descriptive statistics. The research discovered a reasonably significant positive link (R= 0.632) between the financial performance of SMEs and microfinance training services. According to the results, respondents firmly agreed that training by MFIs enabled entrepreneurs to grow their businesses and to make them perform better.

2.4 Theoretical Framework

This section discusses the two main theories that will be applied as anchors to the study. For each theory, the proponents, the key propositions and how the theories inform the relationships among the variables in this study are provided.

2.4.1 Delegated Monitoring Theory

Diamond's (1984) delegated monitoring theory states that financial institutions operate as delegated monitors for net savers and pool the funds together and provide loans and other services to deserving cases. This ensures that deficit units such as households and businesses and sometimes government, who want money for investments will have access to these funds and invest them for the net gain of the individual and the economic system. Applying delegated monitoring, Mercieca, Schaeck, and Wolfe (2009) indicate that the primary sources of outside capital for businesses are banks and other financial intermediaries. Financial institutions that provide microlending services to SMEs use debt contracts to attract savings and also to provide loans and other services to businesses. As financial intermediaries, Love and Martínez (2015) indicate that financial institutions play the role of monitoring the businesses that they provide microlending services to ensure that the use the funds in the agreed activities or operations.

This research applied this theory to link microcredit services and micro saving services with financial performance of manufacturing SMEs. The financial institutions provide microcredit to SMEs which they can use to finance their operations or growth opportunities thus enhancing their financial returns and performance. Besides, the financial contracts drafted by financial intermediaries enable the intermediaries to provide valuable microcredit to SMEs which are largely neglected by the mainstream financial system. This enables these SMEs to finance their working capital, buy raw materials and invest in profitable ventures that enhance their financial performance. Besides, the microsaving facilities provided to SMEs by financial institutions act as a strategy for those SMES to

fulfill corporate objectives, plan for unanticipated circumstances, sustain operations when sales are low, and generate interest for the SME which acts to improve financial performance for the SME. Micro savings also enables the SME to sustain a good relationship with the financial institution which can be helpful when the SME has financial challenges.

2.4.2 Microfinance Theory

The microfinance theory by Yunus (1989) advocates for provision of micro lending and other services to small businesses that have been excluded from the mainstream financial system. These microfinance services enable the underbanked SMEs to finance their operations, and take growth opportunities which enhance their performance and sustainability. According to Muema and Wamugo (2019), microfinance bridges the gap between established banks and unofficial lenders. Conventional banks rarely provide financial services to SMEs due to the high risk of default and adverse selection. The microfinance institutions bridge the financing gap by providing microlending to SMEs. They do this be creating systems and models that enable them to collect information on how hazardous their borrowers are, and thus create strategies to reduce the risks such as by training, group lending, monitoring and providing insurance (Baruah & Bezbaruah, 2020). They also provide risk-based lending by charging higher interest rates to the riskier borrowers.

The microfinance theory was used in this study to relate microinsurance, microcredit and micro finance training services with financial performance of SMEs. Microinsurance

provided by microfinance institutions provide coverage to SMEs against loss of their assets, and other risks such as death illness or injury to the owners or managers of SMEs (Semegn & Bishnoi, 2021). The micro insurance provide coverage for the unforeseen circumstances and thus enabling the SMES to focus on core activities of their businesses for enhanced performance and increased growth. By addressing the issues of moral hazard and adverse selection, microfinance bridges the gap between traditional banks and unregulated lenders and become critical service providers for SME performance and growth (Singh et al., 2022). Moreover, the theory will link microfinance training services with performance of SMEs. Microfinance institutions usually provide training services to SMEs on top of the microcredit, microinsurance and micro saving services they provide. These training services build the capacity of the SMEs in financial management, marketing, corporate development and leadership, and thus providing them with an opportunity to grow and enhance their financial performance.

2.5 Conceptual Framework

A conceptual framework is a collection of ideas about how variables in research are related to one another and how these connections are shown diagrammatically or graphically (McCoach & Cintron, 2022). The research examined the degree to which microcredit, micro saving, microinsurance and microfinance training influence profitability of manufacturing SMEs in Nairobi County, Kenya. In the study's conceptual framework, the response variable was the financial performance of manufacturing SMEs while the predictor variables were microcredit services, micro saving services, microinsurance and microfinance training.

Independent Variables

Microlending services

Microcredit services
- Regular borrowing
- Small loans
- Ease of access
- Interest rates

Micro savings Services
- Accounts with MFIs
- Regular savings
- Small amounts saving
- Pooling funds

Dependent Variable

Financial Performance of SMEs
- Return on assets (Net profit / total asset

Microinsurance
- Insurance cover by MFI
- Small regular premiums
- Cover against risk to employees
- Cover against assets

Microfinance training Services
- Training on financial management
- Training on capital investments
- Training on business growth
- Training on cash management

Figure 2.1: Conceptual framework

2.5.1 Relationship Among Variables in the Conceptual Framework

The conceptual framework presents the independent variables of microlending which are microcredit, micro saving, microinsurance and microfinance training. Microcredit services will be indicated by regular borrowing, small loans offered as credit and ease of access of the microloans. Micro savings will be indicated by SMEs having saving accounts with MFIs, regular savings which can be daily or weekly and small amounts of the saving. Microinsurance will be measured through presence of insurance cover for the SMEs by MFI, payment of small regular premiums and cover against various risks of the assets of the SME or life of the owners. Microfinance training will be indicated by training offered by MFIs to the SMEs regarding financial management, capital investments, and business growth. The dependent variable is financial performance which will be measured using ROA (Net profit / total assets). The Conceptual framework hypothesizes that microcredit, micro saving, micro insurance and microfinance training has an influence on profitability of manufacturing SMEs in Nairobi County, Kenya.

2.6 Summary of Literature Review

The reviewed empirical studies have also indicated various methodological, contextual and conceptual gaps which justifies the current research. The study by Yusgiantoro et al. (2019) focused on micro credit and hence had some conceptual gaps as it did not encompass other microfinance services such as micro insurance, and training. Besides, the study in Lebanon by Moussa (2020) was conducted in a country whose economic context is different from Kenya. Additionally, the study used only secondary data whereas the current research made use of primary and secondary data. Further, the research by Ogah-Alo et al. (2019) in

Nigeria focused on micro credit and did not include other micro lending services such as training, micro saving and micro insurance which are important microlending services provided to SMEs by microfinance institutions. Additionally, the study by Kisaka and Mwewa (2014) focused on SMEs from all sectors whereas the current research only targeted manufacturing SMEs and thus may provide more focused recommendations. This study hence sought to bridge these knowledge gaps.

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2.7 Knowledge Gap

This chapter has provided a review of various global, regional and local studies on the effect of microlending on profitability of SMEs. The reviewed empirical studies indicated various methodological, contextual and conceptual gaps which justifies the current research. The study by Yusgiantoro et al. (2019) focused on micro credit and hence left some conceptual gaps as it did not include other microfinance services such as micro insurance, training and micro insurance. Besides, the study in Lebanon by Moussa (2020) was conducted in a country whose economic context is different from Kenya. Besides, the study used only secondary data whereas the current study will use both primary and secondary data. Further, the study by Ogah-Alo, Ikpor, and Eneje (2019) in Nigeria focused on micro credit and did not include other micro lending services such as training, micro saving and micro insurance which are important microlending services provided to SMEs by microfinance institutions. Additionally, the study by Kisaka and Mwewa (2014) explored the influence of microcredit, training, and micro savings on the growth of SMEs in Machakos County. The study focused on SMEs from all sectors whereas the current

study will only focus on manufacturing SMEs and thus may provide more focused recommendations. This study hence sought to bridge these knowledge gaps.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

The research methodology that was applied in the study that includes the research design and study population is presented in this chapter. Besides, the chapter includes the sampling design, sample size, and the instruments that was applied in data collection. Moreover, the chapter provides the data gathering procedure and the data analysis progress that were applied.

3.2 Research Design

This study adopted a descriptive research design. Saunders et al. (2019) observed that the descriptive design not only provides an account of a phenomenon and its characteristics, but it can also enable a study to establish relationships. This design was therefore appropriate for this study in Nairobi County, Kenya as it enabled the study to provide an accurate account of microlending services that include micro credit, micro insurance, micro saving and training provided to manufacturing SMEs. The design also enabled the research to assess how profitability of the manufacturing SMEs was influenced by micro lending.

3.3 Target Population

The study population was 141 SMEs that engaged in manufacturing activities in Nairobi County, Kenya and were members of KAM (KAM, 2021). The SMEs targeted in the study were those SMEs that were licensed to operate in Nairobi County and registered and licensed by all relevant authorities in their respective manufacturing sectors. The manufacturing SMEs targeted in the study were SMEs in all sectors including agro-processing, textile and apparels sector, building, mining and construction and the

automotive sector. Others were in chemical & allied, food and beverages, energy, electrical and electronics, leather and footwear and plastics and rubber sectors.

3.4 Sample Size and Sampling Procedure

This study was a census. This method collects data from every member of the population, and is most appropriate when the sample is small, accessible and manageable considering the study time and resources (Bell, 2018). This design was selected since the population of 141 manufacturing SMEs in Nairobi County was small and accessible. The study expected to manage and collect data from all the targeted SMEs considering the time and resources available.

3.5 Research Instruments

A structured questionnaire (Appendix I) was applied to collect primary data. The questionnaire was designed to collect primary data on the independent variables (training, micro credit, micro insurance, and micro savings) while the last section of the questionnaire was used to collect secondary data on the SMEs' financial performance (ROA). The questionnaire was administered to finance managers of each manufacturing SME. The finance managers were the units of observation while the manufacturing SMEs were the unit of analysis. Finance managers were selected as the study participants since they are the ones who have in-depth knowledge of the microcredit services that the SMEs received from microfinance institutions.

3.5.2 Validity of the Research Instrument

In research, validity is the degree to which a research tool measures what it purports to measure (Chandra & Sharma, 2019). It offers a judgment on how well the study's data reflects a certain variable or investigative framework (Lincoln & Guba, 2018). To get professional advice and direction from the supervisor, the study submitted the instruments for content validity testing. The researcher requested that the questionnaire be evaluated for representativeness by the academic advisor and other instructors. This guaranteed that the questionnaire had addressed the objectives of the study. Corrections were made in accordance with the comments made after obtaining the expert's recommendations.

3.5.3 Reliability of the Research Instrument

The most important indicator of internal consistency is the index alpha, which is the average correlation between all the variables, regardless of how they are arranged (Flick, 2020). The instrument's dependability was assessed using Cronbach coefficient alpha. According to Muijs (2022), a research instrument must have a Cronbach's alpha value of at least 0.70 in order to be considered trustworthy. The questionnaire was expected to be reliable by giving steady, consistent, and repeatable answers. Amendment or deletion would be undertaken on those items with a coefficient alpha of below 0.7. However, all items were reliable as indicated in Table 3.1.

Table 3.1: Reliability of Questionnaire

Variable	Number of items	Cronbach's alpha
Microcredit	5	0.738
Micro savings	5	0.815
Micro insurance	5	0.749
Microfinance training	5	0.775

The findings [provided in Table 3.1 show that all the questionnaire items relating to the independent variables were reliable. Micro savings had the highest reliability ($\alpha = 0.815$) while microcredit had the lowest reliability ($\alpha = 0.738$). However, all had Cronbach's alpha coefficient of above 0.7 indicating that they all met the reliability threshold.

3.6 Data Collection Procedure

The administration of the questionnaires was done through the drop-and-pick-later method. The questionnaires were printed and administered to the finance managers in their places of work in the SME offices in Nairobi County. The study then agreed with each of the finance managers on the date to collect the filled questionnaires. Follow-up was then conducted and the filled questionnaires collected and filed for analysis. In administering the questionnaires, COVID-19 health guidelines from the Ministry of Health and Nairobi County Government were observed. Regarding secondary data, the study collect data on total assets and net profits which were used to compute ROA for the SMEs. Data for three years (2019-2021) was collected. An average of the ROA for the three years was computed to be matched with the collected primary data for each SME.

3.7 Data Analysis Technique

The analysis of data entailed applying both descriptive analysis and inferential analysis techniques. Frequencies, means, percentages and standard deviations are the descriptive analysis measures that were used. These were conducted both on the general information as well as on the questions appertaining to the independent variables. This was conducted to provide an account of the prevalence of the micro lending services provided to the

manufacturing SMEs in Nairobi County. Moreover, the measures were developed for the secondary data collected to provide an account of financial performance of the SMEs.

The study also applied multiple linear regression to assess the influence of the predictor variables (training, micro savings, micro insurance, and micro credit,) on profitability of manufacturing SMEs in Nairobi County. The model enabled the study to conduct the **f** and **t** tests at 5% level of significance to examine the statistical significance of the independent variables in influencing the dependent variable. The analytical model applied was:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$$

In the model, Y denotes financial performance of the SME (ROA), β_i denotes the coefficients of the independent variables, and α denotes the constant term. X_1 denotes microcredit, X_2 denotes micro savings, X_3 denotes micro insurance and X_4 denotes microfinance training, while ε denotes the error term.

3.8 Ethical Considerations

Each research should give careful thought to ethical issues. All research methodologies and phases of the research process, such as the definition of the research topic, data collection, data analysis and interpretation, writing and dissemination, are subject to ethical concerns (Easterby-Smith, Thorpe, Jackson, & Lowe, 2019). Ethical considerations involve participant permission as well as legal concerns such privacy, confidentiality, intellectual property ownership, access, and acceptance (Flick, 2020). For assistance in the process of gathering data for the study, the researcher sought permission from the University of Nairobi which provided an authorization letter.

During data collection and report writing, the study observed acknowledgement of sources used, informed consent, participant confidentiality, validated reporting, and anonymity. The respondents were provided with guarantees of anonymity and that no one would suffer because of the information they provided since it would only be used for academic reasons. Further, since the study was undertaken during COVID-19 pandemic, all health and legal guidelines such as wearing of masks, social distancing, washing hands and using hand sanitizers were observed.

3.9 Operationalization of Variables

In order to ascertain how the independent variables related to the dependent variable, they were presented as hypothesized statements. A measuring scale with a range of one to five was used to ask the research participants whether they agreed or disagreed with each of the provided statements. In addition, the dependent variable was measured using the reported return on assets of the SMEs. The measurement and operationalization of the variables is provided in Table 3.9.

Table 3.9: Variable Operationalization and Measurement

Objective	Variables	Measurement indicators	Type of Statistical Data Analysis	Measurement scale	Tools of analysis
Establish the influence of microlending services on financial performance of small and medium manufacturing enterprises in Nairobi County, Kenya	Financial performance (dependent variable)	• ROA • ROI	Quantitative	Ratio	Means, percentages and regression analysis

Objective	Variables	Measurement indicators	Type of Statistical Data Analysis	Measurement scale	Tools of analysis
Establish the influence of microcredit services on financial performance of small and medium manufacturing enterprises in Nairobi County, Kenya	Microcredit services (independent variable)	• Regular borrowing • Small loans • Ease of access • Interest rates	Quantitative	Ordinal	Means, percentages and regression analysis
Explore the influence of micro saving services on financial performance of small and medium manufacturing enterprises in Nairobi County, Kenya	Micro savings services (independent variable)	• Accounts with MFIs • Regular savings • Small amounts saving • Pooling funds	Quantitative	Ordinal	Means, percentages and regression analysis
Investigate the influence of microinsurance services on financial performance of small and medium manufacturing enterprises in Nairobi County, Kenya	Micro insurance (independent variable)	• Insurance cover by MFI • Small regular premiums • Cover against risk to employees • Cover against assets	Quantitative	Ordinal	Means, percentages and regression analysis
Examine the influence of micro finance training services on financial performance of small and medium manufacturing enterprises in Nairobi County, Kenya	Microfinance training services(independent variable)	• Training on financial management • Training on capital investments • Training on business growth • Training on cash management	Quantitative	Ordinal	Means, percentages and regression analysis

CHAPTER FOUR: DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Introduction

The process of data analysis, the results of the study, and a discussion of the study results are all covered in this chapter. The chapter first presents the response rate and the general and demographic results. Then the descriptive statistics for the study's variables is provided using means, and standard deviations. Further, results of diagnostic tests are provided which are then followed by the results of the multiple regression analysis. The chapter concludes by discussing the results of the study in light of the reviewed theoretical and empirical literature.

4.2 Response Rate

A population of 141 manufacturing SMEs was targeted in this study. The questionnaires were given to the company's finance managers for completion at their workplaces. The study successfully gathered 92 filled questionnaires, yielding a response rate of 65.2%. The response rate of 65.2% obtained in this research was judged suitable for analysis based on Huntington-Klein's (2021) assertion that a response rate of more than 60% for a paper-based questionnaire survey is reasonable.

4.3 Demographic and General Information

The study's participants, as well as the manufacturing SMEs, were the subjects of the survey, which collected a range of general and demographic data. This includes details on the study participants'' highest degree of education, number of years worked in the organizations, years spent in their current positions, and the number of years that the

manufacturing SMEs had been operational. Figure 4.1 presents the results with regard to highest education level of the study participants.

Table 4.1: Highest Education Level of Study Participants

Education level	Frequency	Percent
College diploma	38	41.3
Undergraduate degree	26	28.3
Master's degree	28	30.4
Total	**92**	**100.0**

Figure 4.1 presents results which reveal that 41.3% of study participants had college diplomas while 28.3% had undergraduate degrees. Those with master's degrees were 30.4%. These findings indicate that the manufacturing SMEs that participated in the study had finance managers who had tertiary level of education. The study also investigated the number of years that the study participants worked in the organizations. The results are shown in Table 4.2 with regard to the duration of employment with the company.

Table 4.2: Number of Years Worked in the Organizations

Number of years	Frequency	Percent
Less than 5	23	25.0
5 - 10	37	40.2
11 - 15	21	22.8
Above 15	11	12.0
Total	**92**	**100.0**

According to the study's findings, which are summarized in Table 4.2, 40.2% of the study participants had worked in the manufacturing SMEs for between five and 10 years while 12% had been working in the manufacturing SMEs for over 15 years. These results show

that the study participants had varied experience in the manufacturing SMEs and were hence expected to provide different perspectives regarding microlending and performance of the manufacturing SMEs.

The study further investigated the number of years that the study participants had served in their current positions at the manufacturing SMEs. The study findings are summarized in in Table 4.3.

Table 4.3: Years Served in Current Position in the Company

Number of years	Frequency	Percent
Less than 5	46	50.0
5 to 10	32	34.8
11 to 15	12	13.0
Above 15	2	2.2
Total	**92**	**100.0**

Table 4.3 presents results which show that 50% had served in their current positions for less than five years while only 2.2% had served in their current positions for over 15 years. Concerning the number of years the manufacturing SMEs had been operational, study results are summarized in Table 4.4.

Table 4.4: Number of Years the Organization has been Operational

Number of Years	Frequency	Percent
Less than 10	36	39.1
10 - 20	28	30.5
21 - 30	21	22.8
Over 30	7	7.6
Total	**92**	**100.0**

The results from the study showed that 39.1% of manufacturing SMEs had been in operation for less than 10 years while only 7.6% had been operation for over 30 years. These findings indicate that most of the SMEs were less than 20 years old.

4.5 Descriptive Statistics

In this part, descriptive results regarding the study's microlending variable (micro credit, micro saving, micro insurance and microfinance training) and the profitability of manufacturing SMEs in terms of ROA are provided. The descriptive statistics encompass the standard deviations and means for each study variable.

4.5.1 Microcredit to Manufacturing SMEs

Study participants were given statements regarding microcredit to their manufacturing SMEs and asked to rate how strongly they agreed (from strongly disagree to strongly agree) with each statement. The findings from the analysis of the responses using means (M) and standard deviations (SD) are summarized in Table 4.5.

Table 4.5: Microcredit to Manufacturing SMEs

Statements on microcredit	Mean	Std. Deviation
This business usually borrows loans regularly from microfinance institutions	3.57	.539
This business heavily relies on loans from microfinance institutions to finance working capital	3.61	.771
In the past three years, the business has accessed microloans from MFIs to grow the business	3.95	.660
Microcredit from MFIs is easy to access for this business	4.19	.712
This business accesses MFI credit at reasonable interest rates	4.23	.601

The study results summarized in Table 4.5 indicate that the study participants agreed that their businesses accessed MFI credit at reasonable interest rates (M = 4.23, SD = 0.601) and also agreed that microcredit from MFIs is easy to access for the manufacturing SMEs (M = 4.19, SD = 0.712). Besides, the study participants also agreed that in the preceding three years from the time of study, the businesses had accessed microloans from MFIs for growth (M = 3.95, SD = 0   .660). The study also determined that respondents agreed that the manufacturing SMEs heavily relied on loans from microfinance institutions to finance working capital (M = 3.61, SD = 0.771). Additionally, study participants also agreed that the manufacturing SMEs usually borrowed loans regularly from microfinance institutions (M = 3.57, SD = 0.539). These study findings imply that the manufacturing SMEs usually borrowed and heavily relied on micro loans regularly from microfinance institutions. Besides, the findings indicated that microcredit from MFIs were easily accessible and provided at reasonable interest rates.

4.5.2 Micro Savings by Manufacturing SMEs

Study participants were provided with statements regarding micro savings by the manufacturing SMEs and asked to rate how strongly they agreed (from strongly disagree to strongly agree) with each statement. The findings from the analysis of the responses using means (M) and standard deviations (SD) are summarized in Table 4.6.

Table 4.6: Micro Savings by Manufacturing SMEs

Statements on micro savings	Mean	Std. Deviation
This organization maintains savings accounts with microfinance institutions	3.96	.572
The business regularly saves cash through savings accounts held with microfinance institutions	3.88	.791

The business has improved its relationships with microfinance institutions through having savings accounts with the microfinance institutions	4.15	.815
The savings the business makes through accounts with microfinance institutions enables it to pool funds for future business goals	3.71	.875
Microfinance institutions have programs to provide loans based on the level of savings with the institution	4.24	.803

The results shown in Table 4.6 indicate that study participants agreed to all the provided statements regarding micro savings by the manufacturing SMEs. Specifically, study participants agreed that microfinance institutions have programs to provide loans based on the level of savings with the institution M = 4.24, SD = 0.803) and also agreed that the manufacturing SMEs had improved their relationships with microfinance institutions through having savings accounts with the microfinance institutions (M = 4.15, SD = 0.815). Moreover, study participants agreed that the manufacturing SMEs maintain savings accounts with microfinance institutions (M = 3.96, SD = 0.572) and further agreed that the manufacturing SMEs regularly saves cash through savings accounts held with microfinance institutions M = 3.88, SD = 0.791). Furthermore, study participants agreed that the savings the manufacturing SMEs made through accounts with microfinance institutions enables them to pool funds for future business goals (M = 3.71, SD = 0.875). The findings imply that micro savings with MFIs was a key feature of manufacturing SMEs. The micro savings enabled the manufacturing SMEs to have a good relationship with MFIs, pool funds and enable them to enhance their loans from the MFIs.

4.5.3 Micro Insurance to Manufacturing SMEs

This study provided the study participants with statements regarding micro insurance to their manufacturing SMEs by MFIs and were required to rate how strongly they agreed (from strongly disagree to strongly agree) with each statement. The findings from the analysis of the responses using means (M) and standard deviations (SD) are summarized in Table 4.7.

Table 4.7: Micro Insurance to Manufacturing SMEs

Statements on Micro insurance	Mean	Std. Deviation
The business has microinsurance provided by microfinance institutions to cover its assets against fire	4.16	.911
Microfinance institutions provide microinsurance services with affordable premiums	4.10	.806
This business has microinsurance provided by microfinance institutions to cover its key employees	2.16	.712
This business has microinsurance provided by microfinance institutions to cover the life of the owners/partners/directors	2.46	.822
The business has microinsurance provided by microfinance institutions to cover its assets against theft	4.19	.664

The study findings summarized in Table 4.7 indicate that the study participants agreed that the manufacturing SMEs had microinsurance provided by microfinance institutions to cover their assets against theft (M = 4.19, SD = 0.664) and also agreed that the manufacturing SMEs had microinsurance provided by microfinance institutions to cover their assets against fire (M = 4.16, SD = 0.911). Besides, study participants agreed that microfinance institutions provide microinsurance services with affordable premiums (M = 4.10, SD = 0.806). However, study participants disagreed that the manufacturing SMEs

had microinsurance provided by microfinance institutions to cover the life of the owners/partners/directors (M = 2.46, SD = 0.822) and also disagreed that the manufacturing SMEs had microinsurance provided by microfinance institutions to cover its key employees (M = 2.16, SD = 0.712). These findings imply that the manufacturing SMEs mostly had microinsurance to cover their assets but rarely covered key employees or directors / owners.

4.5.4 Training by Microfinance Institutions

This study provided the study participants with statements regarding microfinance training by MFIs to the manufacturing SMEs and were required to rate how strongly they agreed ((from strongly disagree to strongly agree) with each statement. The findings from the analysis of the responses using means (M) and standard deviations (SD) are summarized in Table 4.8.

Table 4.8: Training by Microfinance Institutions

Statements on Training by Microfinance Institutions	Mean	Std. Deviation
Employees in this organization have attended various trainings provided by microfinance institutions in the past three years	2.36	.744
The training by microfinance institutions that employees of this business have attended have helped in growing the business	1.93	.817
MFIs provide training to employees in this business that helps employees to gain skills needed to run the business	2.47	.855
Training provided by microfinance institutions have provided the business with financial management skills	4.26	.863
Microfinance institutions have provided valuable training to the business regarding capital investments	4.16	.769

The study results presented in Table 4.8 indicate that the study participants agreed that the training provided by microfinance institutions have provided the manufacturing SMEs with financial management skills (M = 4.26, SD = 0.863) and also agreed that microfinance institutions have provided valuable training to the manufacturing SMEs regarding capital investments (M = 4.16, SD = 0.769). However, study participants disagreed that MFIs provide training to employees in the manufacturing SMEs that helps the employees to gain skills needed to run the business (M = 2.47, SD = 0.855) and also disagreed that employees in the manufacturing SMEs have attended various trainings provided by microfinance institutions in the past three years (M = 2.36, SD = 0.744). Moreover, the study participants disagreed that training by microfinance institutions that employees of the manufacturing SMEs had attended had helped in growing the businesses (M = 1.93, SD = 0.817). The implication of these findings is that training provided by MFIs was valuable and had provided the businesses with financial management and capital investment skills. However, employees of the businesses rarely attended training by MFIs.

4.5.5 Performance of the Manufacturing SMEs

The dependent variable in the research was performance which was measured using ROA. Performance was measured for three years (2019 – 2021) and an average was computed for each manufacturing SMEs to use as input in regression analysis. The mean for ROA for the three years for all the manufacturing SMEs is provided in Table 4.9.

Table 4.9: Descriptive Statistics for ROA

Variable	2019	2020	2021	Mean
ROA	8.14	2.03	4.11	4.76

The study results summarized in Table 4.9 indicate that the mean for ROAfor the manufacturing SMEs in 2019 was 8.14% which reduced to 2.03% in 2022 and increased to 4.11% in 2021. The mean for the three years for all the manufacturing SMEs was 4.76%.

4.6 Diagnostic Tests

Multiple regression analysis was used in the study to address the study objectives and test hypotheses. Before fitting the regression model, the researcher looked for any violations of the linear regression assumptions. The tests conducted encompassed the tests for linearity, multicollinearity, homoscedasticity, and normal distribution of the regression residuals. The first test that was conducted was the linearity test. This was done to determine if the predictors had a linear relationship with the dependent variable. The analysis of variance's deviation from linearity test was used to conduct this test. The results are summarized in Table 4.10.

Table 4.10: Test of Deviation from Linearity

Variables	Sum of Squares	df	Mean Square	F	Sig.
Micro credit * ROA	2.647	2	1.324	1.599	.217
Micro savings * ROA	3.002	2	1.501	2.002	.164
Micro insurance * ROA	1.645	2	0.823	.898	.412
Microfinance training * ROA	2.811	2	1.405	1.594	.210

The relationship between the dependent and predictor variables is linear, which is the null hypothesis of the test. The null hypothesis is thus rejected if the p value is less than 0.05, but accepted if the p value is more than 0.05 (Wooldridge, 2019). The results summarized in Table 4.10 show that there was linearity between all of the predictor and dependent variables since the p values were above 0.05.

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The second test that was undertaken was the multicollinearity test. This evaluates if any two predictor variables have a strong linear relationship. This study used the variance inflation factor (VIF) to measure multicollinearity. The results are summarized in Table 4.11.

Table 4.11: Test of Multicollinearity between Independent Variables

Independent Variables	Collinearity Statistics	
	Tolerance	VIF
Micro credit	.321	3.112
Micro savings	.354	2.828
Micro insurance	.620	1.613
Microfinance training	.839	1.192

The VIF multicollinearity test's critical value is 10. VIF values less than 10 indicate no multicollinearity, whereas VIF values more than 10 indicate multicollinearity (Morgan, 2021). Results provided in Table 4.11 shows that all of the VIFs were less than 10. Therefore, there was no multicollinearity between any two predictor variables, indicating that they were not highly related linearly.

After fitting the model, the study checked the residuals for heteroscedasticity. The regression residuals' variance homogeneity is assessed using the heteroscedasticity test. This test was undertaken using the Breusch-Pagan test. Table 4.12 presents the findings of the study.

Table 4.12: Test of Heteroscedasticity

Test statistic	Chix square	Prob > Chi square
Breusch Pagan	2.491	.128

Heteroscedasticity is present when the p value of the Breusch-Pagan test is below 0.05.

The test reveals homoscedasticity when the p value is above 0.05 (Leigh & Brown, 2021).

The findings in Table 4.12 demonstrate that the variances of the regression errors were homoscedastic since the p value was greater than 0.05 (Chi square = 2.491, p = 0.128).

The last test to be undertaken was the normality of residuals test. In this study, Shapiro-Wilk was used to evaluate the normality of the regression residuals. After the regression model was fitted, the unstandardized errors were developed and their normality was assessed. Table 4.13 provides an overview of the study's findings.

Table 4.13: Tests of Normality of Regression Residuals

	Kolmogorov-Smirnov			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Unstandardized Residuals	.347	92	.214	.964	92	.341

According to the findings summarized in Table 4.13, the regression residuals were determined to be normally distributed (Shapiro-Wilk statistic = 0.964, p = 0.341). The alternative hypothesis was that the residuals were not normally distributed, which is contrary to the null hypothesis of the test. The null hypothesis is accepted when the p value is above 0.05, and it is rejected when the p value is below 0.05 (Morgan, 2021). Thus, the null hypotheses regarding the normal distribution of the regression residuals was accepted.

4.7 Regression Analysis and Hypotheses Testing

The analysis and results of the fitted multiplex regression model are presented in this section. The dependent variable was performance as assessed by ROA, and the predictor variables were micro credit, micro savings, micro insurance and microfinance training. Table 4.14 displays a summary of the regression model's findings.

Table 4.14: Regression Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.780	.608	.590	.399

a. Predictors: (Constant), Micro credit, Micro savings, Micro insurance, Microfinance training

The findings that are provided in Table 4.14 shows that there was a significant linear association (r = 0.780) between the four predictor variables and performance of the manufacturing SMEs. In addition, the results demonstrate that the four independent variables (micro credit, micro savings, micro insurance and microfinance training) can account for 60.8% of the variation in performance of the manufacturing SMEs (r squared = 0.608). This suggests that other factors that were not included in the regression model may be responsible for 39.2% of the variation in the performance of the manufacturing SMEs. The results of the analysis of variance for the regression model are shown in Table 4.15.

Table 4.15: Analysis of Variance of the Regression Model

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	21.470	4	5.368	33.756	.000
	Residual	13.834	87	.159		
	Total	35.304	91			

a. Dependent Variable: ROA
b. Predictors: (Constant), Micro credit, Micro savings, Micro insurance, Microfinance training

According to the findings provided in Table 4.15, the model (F = 33.756, p < 0.05) was statistically significant and provided good fitness to the data. The finding further imply that at least one predictor variable has a significant coefficient, and thus the model has some predictive ability. The results of the t test, which was used to determine the significance of the various predictor variables in the model, are shown in Table 4.16.

Table 4.16: Significance of Regression Model Coefficients

	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
(Constant)	1.260	1.081		1.166	.117
Micro credit	.725	.156	.696	4.638	.000
Micro savings	.460	.100	.722	4.622	.000
Micro insurance	.258	.104	.291	2.487	.015
Microfinance training	.173	.115	.139	1.508	.135

Table 4.16 summarizes the study results which show that performance of manufacturing SMEs was positively and significantly influenced by micro credit ($\beta = 0.725$, $p < 0.05$). According to the study's findings, a one-unit increase in micro credit to manufacturing SMEs would cause 0.725% increase in the performance of the SMEs, and vice versa. The implication of these results is that on average, the manufacturing SMEs that accessed more micro credit from MFIs had higher performance compared to the manufacturing SMEs which accessed lower levels of micro credit.

The study's results, which are shown in Table 4.16, also revealed that the performance of manufacturing SMEs was significantly influenced by micro savings ($\beta = 0.460$, $p < 0.05$).

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These results indicate that a one unit increase in micro savings was expected to result to a 0.46% increase in the performance of manufacturing SMEs and vice versa. These findings further imply that manufacturing SMEs that engaged more in micro savings were expected to perform better than their counterparts that engaged less in micro savings.

According to the study findings (Table 4.16), micro insurance had a significant positive influence on performance of manufacturing SMEs ($\beta = 0.258$, $p = 0.015$). The implication of these study's findings is that a one-unit increase in micro insurance would lead to a 0.258% increase in the performance of the manufacturing SMEs, and vice versa. The results further show that manufacturing SMEs who engaged in micro insurance were expected to experience better performance than their counterparts who did not engage in micro insurance.

The study findings provided in Table 4.16 indicate that microfinance training did not have a significant influence on performance of manufacturing SMEs ($\beta = 0.173$, $p = 0.135$). According to the study's findings, the performance of manufacturing SMEs would not change regardless of the change in microfinance training to the employees of the business. The results also show that manufacturing SMEs who receive microfinance training have no performance advantage over their peers who do not receive microfinance training.

4.8 Discussion of Research Findings

The study results which showed that performance of manufacturing SMEs was positively and significantly influenced by micro credit ($\beta = 0.725$, $p < 0.05$. These findings relate to the delegated monitoring theory which link microcredit services with performance of

manufacturing SMEs. The financial institutions provide microcredit to SMEs which they can use to finance their operations or growth opportunities thus enhancing their financial returns and performance (Diamond, 1984). Besides, the financial contracts drafted by financial intermediaries enable the intermediaries to provide valuable microcredit to SMEs which are largely neglected by the mainstream financial system. This enables these SMEs to finance their working capital, buy raw materials and invest in profitable ventures that enhance their financial performance. The findings of the study of the positive influence of microcredit on performance agrees with the findings by Yusgiantoro et al. (2019) that there are substantial variances in performance between microcredit non-borrowers and borrowers, with the latter group experiencing higher profits and turnover than the latter. The study findings also agree with findings by Moussa (2020) that financial performance of the SMEs had a significant association with the number of microloans accessed. The study by Ogah-Alo, Ikpor, and Eneje (2019) which was undertaken in Nigeria had similar findings that microlending which was measured by the number of advances and loan accessed has a beneficial effect on a number of performance metrics, including net profit, ROE and ROI.

The findings from the study determined that the performance of manufacturing SMEs was significantly influenced by micro savings ($\beta = 0.460$, $p < 0.05$). These findings support Diamond's (1984) delegated monitoring theory which states that financial institutions operate as delegated monitors for net savers and pool the funds together and provide loans and other services to deserving cases. This ensures that deficit units such as businesses who want money for investments will have access to these funds and invest them for the net

gain of the business and the economic system. The findings also concur with the assertions of Mercieca, Schaeck, and Wolfe (2009) who noted that the primary sources of outside capital for businesses are banks and other financial intermediaries which enable businesses to have funds for investments and growth for the net gain and growth of the businesses. The findings from this study also supported the findings by Mnunka (2018) which determined that financial performance of SMEs in Tanzania was impacted by micro savings among others microfinance services. However, the findings disagreed with the findings by Kihara (2017) which showed that micro savings did not have a significant association with the SME's financial profitability.

The study findings established that micro insurance had a significant positive influence on performance of manufacturing SMEs ($\beta = 0.258$, $p = 0.015$). These results support the microfinance theory by Yunus (1989) which posits that microinsurance to small businesses that have been excluded from the mainstream financial system enables growth and performance of these businesses. These microfinance services enable the underbanked SMEs to finance their operations, and take growth opportunities which enhance their performance and sustainability. These findings also agree with Muema and Wamugo (2019) that microinsurance bridges the gap between established banks and unofficial lenders and thus providing a window to SMEs to access financial services such as microinsurance that enable them to reduce risks and enhance performance. The findings from the current study also concurred with the findings by Amoah and Mungai (2020) that microinsurance had a favorable and considerable influence on profitability of SMEs.

The study findings indicate that microfinance training did not have a significant influence on performance of manufacturing SMEs (β = 0.173, p = 0.135). These findings contradicted the microfinance theory which predicts that microfinance training services have a positive effect on performance of SMEs as also indicated by Semegn and Bishnoi (2021). The study also disagreed with the findings by Singh et al. (2022) which determined that training services to SMEs provided by microfinance institutions build the capacity of the SMEs in financial management, marketing, corporate development and leadership, and thus providing them with an opportunity to grow and enhance their financial performance. The findings from this study regarding microfinance training agreed with the findings by Kisaka and Mwewa (2014) that training did not significantly influence the performance or growth of SMEs. However, the findings from this study contradict the findings by Mutuma and Omagwa (2019) who established that there was a significant positive relationship between the profitability of SMEs and microfinance training services.

CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

The summary, conclusion, and recommendations from the research are included in this chapter. The chapter also analyzes the limitations of the study and potential further research possibilities.

5.2 Summary of Findings

The study results showed that performance of manufacturing SMEs was positively and significantly influenced by micro credit (β = 0.725, p < 0.05). The descriptive study findings showed the manufacturing SMEs accessed MFI credit at reasonable interest rates (M = 4.23, SD = 0.601) and that microcredit from MFIs was easy to access for the manufacturing SMEs (M = 4.19, SD = 0.712). Besides, the study determined that in the preceding three years from the time of study, the businesses had accessed microloans from MFIs for growth (M = 3.95, SD = 0 .660). The study also determined that the manufacturing SMEs heavily relied on loans from microfinance institutions to finance working capital (M = 3.61, SD = 0.771). Additionally, study established that the manufacturing SMEs usually borrowed loans regularly from microfinance institutions (M = 3.57, SD = 0.539).

The results of the study determined that the performance of manufacturing SMEs was significantly influenced by micro savings (β = 0.460, p < 0.05). Descriptive results showed that microfinance institutions have programs to provide loans based on the level of savings with the institution M = 4.24, SD = 0.803) and also determined that the manufacturing

SMEs had improved their relationships with microfinance institutions through having savings accounts with the microfinance institutions (M = 4.15, SD = 0.815). Moreover, the study determined that the manufacturing SMEs maintained savings accounts with microfinance institutions (M = 3.96, SD = 0.572) and that the manufacturing SMEs regularly saved cash through savings accounts held with microfinance institutions M = 3.88, SD = 0.791). Furthermore, the study determined that the savings the manufacturing SMEs made through accounts with microfinance institutions enabled them to pool funds for future business goals (M = 3.71, SD = 0.875).

The study findings determined that micro insurance had a significant positive influence on performance of manufacturing SMEs (β = 0.258, p = 0.015). Descriptive results showed that the manufacturing SMEs had microinsurance provided by microfinance institutions to cover their assets against theft (M = 4.19, SD = 0.664) and that the manufacturing SMEs had microinsurance provided by microfinance institutions to cover their assets against fire (M = 4.16, SD = 0.911). Besides, the study determined that microfinance institutions provided microinsurance services with affordable premiums (M = 4.10, SD = 0.806). However, the study established that the manufacturing SMEs did not have microinsurance provided by microfinance institutions to cover the life of the owners/partners/directors (M = 2.46, SD = 0.822) and that the most manufacturing SMEs did not have microinsurance provided by microfinance institutions to cover their key employees (M = 2.16, SD = 0.712).

The study findings showed that microfinance training did not have a significant influence on performance of manufacturing SMEs (β = 0.173, p = 0.135). Further, findings indicated

that training provided by microfinance institutions had provided the manufacturing SMEs with financial management skills (M = 4.26, SD = 0.863) and that microfinance institutions had provided valuable training to the manufacturing SMEs regarding capital investments (M = 4.16, SD = 0.769). However, the study determined that that MFIs rarely provided training to employees in the manufacturing SMEs that helped the employees to gain skills needed to run the business (M = 2.47, SD = 0.855) and that employees in the manufacturing SMEs rarely attended various trainings provided by microfinance institutions in the past three years (M = 2.36, SD = 0.744). Moreover, the study determined that microfinance institutions seldom provided training to employees of the manufacturing SMEs had to help in growing the businesses (M = 1.93, SD = 0.817).

5.3 Conclusion

The findings of the study lead to the following conclusions. First, the study concludes that microcredit to manufacturing SMEs is vital for the performance of the manufacturing SMEs. The study further concludes that micro savings by manufacturing SMEs in MFIs is essential for the performance of the manufacturing SMEs. These micro savings enable the SMEs to have a good relationship with MFIs and also enhances the loans received from the MFIs. Further, the study concludes that micro insurance from MFIs is vital for the performance of manufacturing SMEs. The micro insurance enables manufacturing SMEs to covers various business risks thus reducing their cost of capital and hence their performance and growth prospects. Lastly, the study concludes that microfinance training provide by microfinance institutions are not pivotal towards the performance of manufacturing SMEs.

5.4 Recommendations

The study recommends to manufacturing SMEs to seek microcredit services from MFIs to enable them to take advantage of profitable investment opportunities. Besides, the study recommends to MFIs to enhance their microcredit services to SMEs to address the financing challenge that SMEs face. Besides, MFIs should consider providing microcredit to SMEs at fair interest rates and provide fair terms to make microcredit accessible to manufacturing SMEs.

Concerning micro savings, the study recommends to manufacturing SMEs to enhance their saving culture by opening accounts in various MFIs. This would enhance their loan amounts since most MFIs offer loans based on the amount of savings that client have. Moreover, MFIs should act as effective delegated monitors and provide valuable advice to manufacturing SMEs regarding savings and other microlending services that the MFIs have that can be suitable for the SMEs.

Regarding microinsurance, the study recommends to manufacturing SMEs to take microinsurance to cover their valuable assets against risks such as theft, and fire. Besides, manufacturing SMEs should consider taking microinsurance to cover its key staff including owners, directors and partners who could adversely affect the business in case of death, incapacitation or sickness. Besides, the study recommends to MFIS to educate and advice SMEs on the various micro insurance services they can provide that can be beneficial to SMEs.

The study recommends to SMEs to take up microfinance training services for all their staff that deals with finance and related matters. Further, top management of manufacturing SMEs should ensure that their key staff have the required skills and knowledge regarding management of finances, investments and business operations. To MFIs, the study recommends that they should have a policy to provide training to SMEs as an add-on when they provide other services. This would ensure that the SMEs are in a better position to utilize the other MFI services effectively.

5.5 Limitations of the Study

This research determined the influence of microlending on performance of manufacturing SMEs and produced insightful results that may be helpful for policy, theory, and practice. The research does have certain limitations, however, and they should be taken into account when applying or extrapolating the results to other companies or businesses. The research only took into account manufacturing SMEs; hence the results may not be easily transferable to other SMEs or different sized organizations like large or micro enterprises. The effect of microlending on performance, as determined by ROA, was also evaluated in the research. The results could therefore be insufficient to predict how microlending will affect other performance indicators like EPS, ROCE and ROE.

The research is somewhat restricted since it only applied a questionnaire to gather the study data. The research excluded other data gathering approaches such as document analysis, historical review of records and interviews which could provide deeper and more objective information regarding microlending and hot it has influenced performance in the

manufacturing SMEs. Therefore, the research did not provide various perspectives on how microlending could influence performance of manufacturing SMEs.

5.6 Suggestions for Further Research

The following recommendations for more research are specified in light of the study's few intrinsic limitations. The findings may not be readily transferable to other SMEs, such as agricultural, service, and construction SMEs, given the study primarily focused on manufacturing SMEs. The study recommends future research to ascertain how microlending influences performance of SMEs in other sectors apart from the manufacturing sector. The influence of microlending on performance as measured by ROA was examined in this study. As a consequence, the findings may not be able to provide light on how microlending may affect other financial performance measures like ROE and ROCE. It is thus advised to do more research to determine how these other performance indicators are impacted by microlending.

The fact that this study only applied questionnaires and secondary data to assess how microlending influence performance of manufacturing SMEs was another limitation. Due to the limitations of a structured questionnaire, some vital information may not be apparent. Therefore, further research may consider other data gathering approaches such as interviews, document analysis and historical analysis of records to objectively determine the level of microcredit, micro insurance, micro savings and microfinance training. This would provide the study with different perspectives and more objective data on the independent variables.

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APPENDIX: QUESTIONNAIRE

PART A: GENERAL INFORMATION

1. What is the highest level of education you have attained?

Doctorate	[ ]	Master's Degree	[ ]
Undergraduate degree	[ ]	College Diploma	[ ]
College Certificate	[ ]		

2. How many years have you worked in this organization?

Less than 5 years	[ ]	5 to 10 years	[ ]
11 to 15 years	[ ]	Above 15 years	[ ]

3. How many years have this organization been operational?

Less than 10 years	[ ]	10 to 20 years	[ ]
21 to 30 years	[ ]	Over 30 years	[ ]

4. How many years have you served in your current position?

Below 2 years	[ ]	2 to 5 years	[ ]
6 to 8 years	[ ]	9 to 11 years	[ ]
More than 11 years	[ ]		

PART B: MICRO CREDIT

For the statements on micro credit provided in the table below, kindly indicate the extent of your agreement to the statements in relation to this SME. Kindly use the following key.

Key: | **1-Strongly Disagree** | **2-Disagree** | **3-Neutral** | **4-Agree** | **5-Strongly Agree**

	Statement	1	2	3	4	5
1	This business usually borrows loans regularly from microfinance institutions					
2	This business heavily relies on loans from microfinance institutions to finance working capital					
3	In the past three years, the business has accessed microloans from MFIs to grow the business					
4	Microcredit for MFIs is easy to access for this business					

	Statement	1	2	3	4	5
5	This business accesses MFI credit at reasonable interest rates					

PART C: MICRO SAVINGS

For the statements on micro savings provided in the table below, kindly indicate the extent of your agreement to the statements in relation to this organization. Kindly use the following key.

Key: | **1-Strongly Disagree** | **2-Disagree** | **3-Neutral** | **4-Agree** | **5-Strongly Agree**

	Statement	1	2	3	4	5
1	This organization maintains savings accounts with microfinance institutions					
2	The business regularly saves cash through savings accounts held with microfinance institutions					
3	The business has improved its relationships with microfinance institutions through having savings accounts with the microfinance institutions					
4	The savings the business makes through accounts with microfinance institutions enables it to pool funds for future business goals					
5	Microfinance institutions have programs to provide loans based on the level of savings with the institution					

PART D: MICRO INSURANCE

For the statements on micro insurance provided in the table below, kindly indicate the extent of your agreement to the statements in relation to this business. Kindly use the following key.

Key: | **1-Strongly Disagree** | **2-Disagree** | **3-Neutral** | **4-Agree** | **5-Strongly Agree**

	Statement	1	2	3	4	5

1	The business has microinsurance provided by microfinance institutions to cover its assets against fire					
2	Microfinance institutions provide microinsurance services with affordable premiums					
3	This business has microinsurance provided by microfinance institutions to cover its key employees					
4	This business has microinsurance provided by microfinance institutions to cover the life of the owners/partners/directors					
5	The business has microinsurance provided by microfinance institutions to cover its assets against theft					

PART E: TRAINING BY MICROFINANCE INSTITUTIONS

For the statements on training by microfinance institutions provided in the table below, kindly indicate the extent of your agreement to the statements in relation to this business. Kindly use the following key.

Key:	1-Strongly Disagree	2-Disagree	3-Neutral	4-Agree	5-Strongly Agree

	Statement	1	2	3	4	5
1.	Employees in this organization have attended various trainings provided by microfinance institutions in the past three years					
2	The training by microfinance institutions that employees of this business have attended have helped in growing the business					
3.	MFIs provide training to employees in this business that helps employees to gain skills needed to run the business					
4.	Training provided by microfinance institutions have provided the business with financial management skills					
5.	Microfinance institutions have provided valuable training to the business regarding capital investments					

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PART F: ASSETS AND PROFITABILITY OF THE SME

Kindly indicate the book value of assets and the net profits that the business reported at the end of the years indicated.

Measure	2019	2020	2021
Net profit			
Total assets			
Capital employed			