AN ASSESSMENT OF MICRO, SMALL AND MEDIUM ENTERPRISES (MSMEs)'S RISK MANAGEMENT PREPAREDNESS: A CASE OF MSMEs IN LUSAKA'S CENTRAL BUSINESS DISTRICT

BY

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DECLARATION

I, **AMUKENA JOSEPH LUBASI**, do hereby declare that this work is my original work achieved through personal reading and research. This work has never been submitted to the University of Zambia or any other Universities. All sources of data used and literature on related works previously done by others, used in the production of this Dissertation, have been duly acknowledged. If any omission has been made, it is not by choice but by error.

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ABSTRACT

This study sought to investigate the risk management preparedness of Micro, Small and Medium Enterprises (MSMEs) in Lusaka's Central Business District (LCBD), focusing on the strategies used and their effectiveness. Employing a cross-sectional, quantitative approach, data was collected from 385 MSMEs using structured questionnaires and a convenient sampling method. Cochran's formula was used to determine the sample size. Descriptive statistics and regression analysis were applied to evaluate the relationship between risk management strategies and preparedness levels. Findings reveal that only 24 percent of MSMEs are adequately prepared for risks, indicating high vulnerability to operational and financial shocks, particularly from environmental, economic, or market disruptions. Among the four risk management strategies examined, risk avoidance was the most commonly used, followed by risk spreading. However, risk retention and risk transferring were less frequently adopted, raising concerns about overall preparedness. Regression results showed that all four strategies significantly influenced preparedness. Risk transferring had the strongest positive impact ($\beta = 0.206$, $p = 0.000$), indicating that MSMEs using insurance and risk-sharing mechanisms were 20.6 percent more likely to be prepared for disruptions. Risk avoidance ($\beta = 0.152$, $p = 0.000$) and risk spreading ($\beta = 0.128$, $p = 0.005$) also had significant positive associations, suggesting that minimizing exposure and diversifying operations contribute to resilience. Conversely, risk retention was negatively associated with preparedness ($\beta = -0.091$, $p = 0.031$), indicating that relying solely on internal resources reduces readiness for crises. The model demonstrated strong explanatory power, with an R-squared of 0.744 and an adjusted R-squared of 0.735, meaning 74.4 percent of the variation in preparedness could be explained by the four strategies. The model was statistically significant ($F = 18.59$, $p = 0.000$). These results have practical implications. MSME owners are encouraged to adopt diversified risk management approaches. Policymakers should develop programs promoting the adoption of various strategies and increase awareness of financial tools. Financial institutions are urged to design accessible insurance products tailored to MSME needs. Development partners should offer technical assistance, training, and capacity building to enhance MSME resilience. The study concludes that improving MSME preparedness in Lusaka's CBD requires a holistic strategy combining risk avoidance, spreading, and transferring, while reducing reliance on risk retention. This integrated approach will enhance the ability of MSMEs to withstand external shocks and ensure their long-term sustainability.

Keywords: MSMEs; Risk Management Strategies; Risk Preparedness, Lusaka's Central Business District

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DEDICATION

I dedicate this dissertation to my wife, Mukabi Saboi for her unwavering support, encouragement, and most importantly her love and prayers. Also, to my children (Tumelo Joseph Lubasi and Tebuho Lubasi) who continue to be a source of inspiration and pride.

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LIST OF ACRONYMS

IAETM	Identify, Analyze, Evaluate, Treat, and Monitor
LCBD	Lusaka's Central Business District
MSMEs	Micro, Small, and Medium Enterprises
RMT	Risk Management Theory
RBV	Resource-Based View

CHAPTER 1

INTRODUCTION

1.0 Introduction

This chapter introduces the research on the risk management preparedness of Micro, Small and Medium Enterprises (MSMEs) in Lusaka's Central Business District (LCBD). It provides an overview of the background and context of the study, highlighting the crucial role MSMEs play in Zambia's socio-economic development. The chapter also presents the problem statement, outlining the challenges faced by MSMEs in managing risks effectively. The purpose of the study, research objectives, significance, and scope are discussed, alongside the theoretical and conceptual frameworks that guide the study. Key terms used in the study are defined to ensure clarity in understanding the concepts and variables central to this research.

1.1 Background of the Study

MSMEs play a critical role in the economic development of Zambia, contributing significantly to employment generation, poverty alleviation, and economic diversification. In Zambia, MSMEs constitute a substantial portion of the business ecosystem, accounting for over 90 percent of businesses operating across the country (Chikozho, 2016). These enterprises are particularly important in the country's urban areas, including LCBD, where they act as engines of economic activity by generating employment, creating local wealth, and fostering innovation. MSMEs in Zambia span various sectors, including retail, manufacturing, agriculture, construction, and services, and their economic footprint is vital for the growth and sustainability of the national economy (Mwaanga, 2014).

In Zambia, MSMEs are defined in line with the World Bank's classification, which includes businesses with between 1 and 100 employees. This definition captures a wide spectrum of businesses, ranging from micro-enterprises that operate with a handful of employees to small enterprises that are gradually expanding, and medium-sized businesses that play an increasingly larger role in the economy (World Bank, 2020). These businesses are critical in driving local economic development, especially in urban centers like Lusaka, where a significant number of people rely on MSMEs for employment and income generation (Fungwe & Kabubi, 2019). While the MSME sector is varied in terms of size, sector, and operational characteristics, it remains the cornerstone of employment in Zambia, employing a large portion of the labor force, particularly in the informal sector.

The significance of MSMEs in LCBD is particularly pronounced. LCBD is a bustling commercial hub where MSMEs dominate the landscape, contributing to the vibrancy of the local economy (Mwaanga, 2014). The district houses numerous businesses, ranging from small retail outlets, food vendors, artisans, and service providers, to medium-sized enterprises that deal with more specialized sectors such as construction, transportation, and hospitality. According to the Zambia Development Agency (ZDA, 2020), approximately 97 percent of businesses in Lusaka's Central Business District are classified as MSMEs, emphasizing the ubiquity of these enterprises in the local economic ecosystem. MSMEs in LCBD are responsible for a significant share of employment in the district, with estimates suggesting that they engage up to 18 percent of the workforce (Nuwagaba, 2015). This economic contribution is crucial for providing livelihood opportunities for residents, particularly in a country like Zambia, where unemployment remains a persistent challenge.

Furthermore, MSMEs in LCBD contribute significantly to gender inclusivity in the local labor market. Women, for example, represent almost 47 percent of the workforce in the MSME sector in Zambia, highlighting the role that these businesses play in promoting economic equality (Mwaanga, 2014). This gender-inclusive employment strategy is vital, as it empowers women, reduces gender disparities, and fosters a more equitable society. Through MSMEs, women in Zambia are able to access entrepreneurial opportunities, participate in decision-making processes, and contribute to the economic development of their communities.

Despite the critical role that MSMEs play in the Zambian economy, these businesses face numerous challenges, with risk management emerging as a significant concern. The nature of risks faced by MSMEs in Zambia is diverse, with both internal and external risks affecting their operations. Internal risks include issues related to organizational inefficiencies, poor management practices, and lack of skilled labor, while external risks are largely influenced by the broader economic environment, including inflation, exchange rate fluctuations, changes in market demand, and competition from larger firms (Hapompwe et al., 2021). The vulnerability of MSMEs to such risks is exacerbated by their limited financial resources and lack of access to formal risk management tools, which places them at a disadvantage compared to larger enterprises.

In Zambia, MSMEs are often characterized by a lack of capacity in terms of risk management, with many small businesses relying on informal practices to mitigate risks. These informal practices can be insufficient in addressing the complex and dynamic risks faced by these

enterprises. Research has shown that while some MSMEs in Zambia are aware of the risks they face, many lack structured strategies to effectively manage these risks, leaving them exposed to both financial and operational vulnerabilities (Rwigema, 2020). Additionally, there is limited access to risk management tools such as insurance products and financial risk mitigation strategies, which are often either too expensive or inaccessible to MSMEs operating in the informal sector (Hanggraeni et al., 2019).

The low equity ratios typical of MSMEs in Zambia further exacerbate their vulnerability to external risks. Unlike larger corporations that have access to diverse financial instruments, MSMEs operate with minimal capital, making it difficult for them to absorb shocks such as market downturns or unexpected operational disruptions. This financial fragility is a key challenge for MSMEs in Zambia, as it limits their ability to invest in risk mitigation strategies and infrastructure improvements that could help them weather external crises (Kusumawardhani et al., 2015). Given the limited resources available to these enterprises, the need for effective risk management practices has never been more urgent.

Moreover, research indicates that many MSMEs in Zambia do not adequately prepare for environmental risks, such as natural disasters or climate-related events, despite their significant impact on business operations. This is particularly true for businesses in agriculture, where weather-related disruptions can lead to considerable financial losses. While the importance of climate resilience is increasingly recognized globally, MSMEs in Zambia often lack the knowledge and resources to implement adaptive measures to mitigate environmental risks (Gade, 2018). As such, the lack of preparedness for environmental risks is a critical issue that needs to be addressed to improve the resilience of MSMEs in the country.

This study is specifically focused on MSMEs in LCBD, examining their preparedness for risks and the strategies they employ to manage these risks. The study defines MSMEs according to the World Bank's classification, which includes businesses with between 1 and 100 employees. This definition allows the study to capture a broad range of enterprises, from micro-enterprises with very few employees to small and medium-sized businesses that have a larger operational footprint. The participants in the study are drawn from various sectors, including retail, hospitality, construction, transport, and manufacturing, and represent a cross-section of MSMEs with varying operational characteristics and risk management approaches.

The research seeks to assess the risk preparedness of MSMEs in LCBD, with a focus on understanding the types of strategies employed by these enterprises and their effectiveness in

mitigating risks. Given the diverse nature of MSMEs in Zambia, the study will analyze whether different types of businesses, based on their size, sector, and resources employ distinct risk management strategies. It will also explore the relationship between the use of formal and informal risk management tools and the level of risk preparedness among MSMEs. The findings will provide valuable insights into how MSMEs in Zambia can improve their resilience and better navigate the risks they face.

The need for effective risk management in MSMEs in Zambia is critical for their survival and growth. By identifying the risks they face and implementing appropriate strategies to mitigate these risks, MSMEs can enhance their operational stability and long-term sustainability. However, the lack of resources and access to formal risk management tools remains a significant barrier. Policymakers, financial institutions, and development partners must prioritize efforts to support MSMEs in Zambia, particularly by improving access to affordable risk mitigation tools, providing capacity-building programs, and fostering a risk-aware business culture. Through such interventions, MSMEs can be empowered to better manage risks and thrive in an increasingly competitive and volatile business environment.

This study contributes to the growing body of knowledge on MSMEs in Zambia and the role of risk management in enhancing their resilience. It aims to provide actionable insights that can guide policymakers, financial institutions, and MSME owners in strengthening risk management practices and improving the overall preparedness of MSMEs in LCBD.

1.2 Statement of the Problem

Despite the significant role that MSMEs play in Zambia's economy accounting for over 97 percent of all businesses and employing approximately 70 percent of the workforce (Fungwe & Kabubi, 2019), little is known about the extent to which MSMEs in LCBD are adequately prepared for risks. Literature suggests that MSMEs, especially in developing economies, lack robust risk management systems, business continuity, and crisis management cultures and systems. Their exposure to various risks, both locally, further underscores their vulnerability (Balasubramanian, 2022). Although existing studies show that only 30 percent of MSMEs have formal risk management strategies (Balasubramanian, 2022), it remains unclear how these strategies are implemented in practice, and whether informal approaches used by 40 percent of businesses (Panigrahi et al., 2012), provide sufficient resilience. Furthermore, 62 percent of businesses that adopt risk management measures do so ineffectively (Sunjka & Emwanu, 2015), yet little is known about the specific factors contributing to this ineffectiveness.

Additionally, the perception that risk management is a non-essential expense, held by 55 percent of MSMEs (Panigrahi et al., 2012), raises questions about awareness and attitudes towards structured risk practices. This study seeks to address these gaps by assessing the risk preparedness of MSMEs in LCBD.

1.3 Aim or Purpose of the Study

To determine the level of risk management preparedness among MSMEs in Lusaka's Central Business District.

1.4 Specific Objectives

1. To investigate the types of risk management strategies implemented by MSMEs.
2. To evaluate the effect of the risk management strategies implemented by MSMEs' on risk management preparedness.

1.5 Research Questions

1. What risk management strategies are currently implemented by MSMEs?
2.What is the effect of the implemented risk management strategies on the risk management preparedness of MSMEs?

1.6 Significance of the Study

This study is important because it addresses the gaps in understanding the risk management preparedness of MSMEs in Lusaka's Central Business District. MSMEs are critical to Zambia's socio-economic development, contributing to employment creation, poverty reduction, and economic diversification. However, their vulnerability to risks and lack of structured risk management strategies threaten their sustainability.

The primary beneficiaries of this study are policymakers, MSME owners, and development stakeholders. Policymakers will benefit by gaining evidence-based insights that can guide the formulation of supportive policies and programs to enhance MSME resilience. MSME owners and managers will benefit by understanding the importance of adopting effective risk management strategies to protect and grow their businesses. Development agencies and financial institutions can also use the findings to design interventions and financial products that address MSMEs' risk management needs.

Additionally, the study contributes to academic literature by expanding knowledge on MSME risk management practices in the Zambian context, thereby supporting future research and promoting the development of more resilient and sustainable enterprises.

1.7 Scope of the Study

The scope of this study is focused on assessing the risk management preparedness of MSMEs operating within Lusaka's Central Business District in Zambia. The geographical scope is confined to this business district to allow a targeted investigation of risk management practices in a defined urban setting. The study spans various sectors and industries represented by MSMEs in the Lusaka LCBD.

In terms of the temporal scope, data collection was conducted through interviews between December 2023 and October 2024. While the primary focus is on current risk management practices during this period, the study also references historical data and trends to provide context and analyze changes over time.

The research is limited to MSMEs as defined by the World Bank, which includes businesses with between 1 and 100 employees. Participants encompass a diverse range of businesses, covering various sectors, sizes, and operational characteristics within the specified geographic area.

1.8 Theoretical and Conceptual Framework

1.8.1 Theoretical Framework

This study is grounded in two key theoretical perspectives: the Risk Management Theory (RMT) and the Resource-Based View (RBV) of the firm. These frameworks offer complementary insights into how MSMEs in Lusaka’s Central Business District implement risk management strategies and how these strategies influence their risk preparedness.

The RMT emphasizes the structured identification, assessment, and mitigation of risks within organizational operations (Mthiyane et al., 2022). RMT posits that businesses must adopt proactive, systematic approaches to anticipate and manage uncertainties to remain sustainable in volatile environments (Vasvári, 2015). In the context of this study, RMT directly informs the first specific objective of investigating the types of risk management strategies employed by MSMEs. It offers a lens through which the study examines whether MSMEs use reactive, ad hoc methods or structured, anticipatory frameworks for managing operational, financial, or strategic risks.

However, empirical studies applying RMT to MSMEs have shown mixed findings. While structured risk management is associated with greater resilience (Hanggraeni et al., 2019), small enterprises often struggle to implement such systems due to resource constraints, limited expertise, and cost perceptions (Panigrahi et al., 2012). This study critically examines whether MSMEs in Lusaka reflect these challenges, or whether unique local adaptations of RMT principles emerge. Thus, RMT is not only descriptive but is tested in its applicability to small, resource-constrained firms in an African urban setting.

Complementing RMT, the RBV offers a critical internal perspective on MSME resilience and risk management preparedness. The RBV asserts that an enterprise's sustainable competitive advantage lies in its possession and strategic deployment of valuable, rare, inimitable, and non-substitutable (VRIN) resources (Grant, 1991). In this study, RBV informs the second objective — evaluating how MSMEs' internal resources (e.g., financial assets, human capital, organizational agility) affect their risk management preparedness.

Empirical literature supports the RBV application to MSMEs: businesses with stronger financial bases, skilled management teams, and flexible structures tend to exhibit superior risk responsiveness and survival rates (Kumar et al., 2022; Hanggraeni et al., 2019). Nonetheless, critics argue that RBV often overlooks external environmental pressures and overstates internal capabilities, especially in small firms operating under high uncertainty (Barney, 2001). This study, therefore, critically assesses whether internal resources alone explain preparedness among Lusaka's MSMEs, or whether contextual factors such as regulatory environments and market volatility dilute the RBV's explanatory power.

By integrating RMT and RBV, this study adopts a multi-dimensional view: RMT frames the structured processes and behaviors MSMEs engage in to manage risk, while RBV highlights the internal capabilities enabling or constraining these processes. This theoretical combination strengthens the study's analysis, allowing for a deeper understanding of both the strategies MSMEs adopt and the organizational factors influencing their effectiveness.

1.8.2 Conceptual Framework

The conceptual framework is structured around three primary components: Risk Management Strategies, Risk Management Preparedness, and External Influencing Factors. Through these key components, the framework provides a comprehensive understanding of how MSMEs respond to risks and how external factors influence their preparedness.

Risk Management Strategies (Independent Variables)

The first component of the conceptual framework addresses the various risk management strategies that MSMEs can implement. These strategies are categorized as independent variables and are essential to understanding the first objective of the study: identifying the types of risk management strategies that MSMEs in LCBD are employing. Based on existing literature, four primary strategies have been identified: Risk Avoidance, Risk Retention, Risk Spreading, and Risk Transferring.

Risk Avoidance involves taking steps to eliminate or completely avoid certain risks, such as avoiding risky markets or activities that could potentially jeopardize the business. MSMEs employing this strategy may opt not to expand into high-risk areas or may choose to avoid engaging with certain partners or customers perceived to carry a high risk (Pérez-López et al., 2020). Operationalization of risk avoidance is measured through survey responses or interviews where MSMEs report their actions, such as whether they avoid entering volatile markets or refuse contracts deemed too risky. Indicators for this strategy include the percentage of MSMEs avoiding specific markets or types of business engagement that could expose them to significant risks.

Risk Retention, on the other hand, involves accepting certain risks and managing them internally, typically because the risks are considered small or manageable. MSMEs that adopt this strategy may choose to deal with minor operational risks themselves without seeking external solutions, such as insurance (Dube et al., 2021). Operationalization of this strategy is assessed by asking MSMEs whether they accept smaller risks as part of their business operations and how they manage them. Key indicators include the frequency with which MSMEs handle minor risks internally and whether they are actively avoiding formal risk transfer mechanisms like insurance.

Risk Spreading is a strategy where MSMEs diversify their operations, either by expanding their product range, entering new markets, or building a network of suppliers and partners. Diversification helps to reduce the potential impact of any single risk on the business (Mazzarol & Reboud, 2020). This strategy is operationalized by measuring the degree of diversification within the business's operations, such as the number of product lines, markets, or geographic locations the business is engaged in. MSMEs are asked about their market and product diversification strategies and the extent to which these have helped them manage or mitigate risks.

Risk Transferring refers to the practice of shifting risks to other parties, often through insurance or outsourcing. This is a common strategy among MSMEs that aim to protect themselves from large, unforeseen risks by transferring the financial burden to insurance companies or other third parties (Wang et al., 2021). Operationalization of this strategy measured by the extent to which MSMEs use insurance products, outsourcing, or contractual agreements to mitigate risks. Indicators include the number of MSMEs that have insurance coverage and the types of risks transferred to third parties, such as property damage or business interruption.

These four risk management strategies directly influence the MSMEs' ability to manage risks effectively and are expected to have varying levels of impact on their preparedness. For instance, MSMEs that successfully employ risk-spreading strategies may demonstrate better resilience in times of market volatility, while those who rely on risk retention may experience operational continuity when dealing with minor risks. Additionally, the feedback loop between these strategies and external factors, such as regulatory support or access to financial resources, will provide insights into how MSMEs adapt their risk management approaches over time. This dynamic interaction reflects the evolving nature of risk management as businesses learn and respond to changing internal and external environments.

Risk Management Preparedness (Dependent Variable)

The second major component of the framework is Risk Management Preparedness, which serves as the dependent variable. Risk management preparedness refers to the capacity of MSMEs to anticipate, mitigate, and respond to both internal and external risks (Mazzarol & Reboud, 2020). This component directly addresses the second objective of the study: evaluating the effect of risk management strategies on MSMEs' preparedness to handle risks. Preparedness is measured in terms of three key outcomes: resilience, operational continuity, and growth opportunities.

Resilience refers to the ability of MSMEs to maintain stable operations despite the occurrence of unexpected events or crises. MSMEs that are more resilient can absorb financial shocks, market disruptions, or operational setbacks without significant harm to their long-term viability (Mazzarol & Reboud, 2020). Operationalization of resilience is measured through self-reported data on business survival during adverse conditions, such as financial crises or supply chain disruptions. Indicators include the number of MSMEs that were able to sustain operations during such events, as well as their ability to recover quickly.

Operational Continuity is the ability of MSMEs to continue essential business functions even when minor risks materialize. For example, MSMEs that engage in risk retention strategies are likely to experience fewer operational disruptions (Dube et al., 2021). This preparedness outcome is operationalized by asking MSMEs about the continuity of their business activities during minor setbacks, such as equipment failures or staffing shortages. Key indicators include the duration of operational downtime during crises and the level of financial impact during these disruptions.

Growth Opportunities are the avenues for expansion that MSMEs can pursue by taking calculated risks. While risk avoidance strategies may protect businesses from immediate threats, they can also limit growth potential. By balancing risk-taking with preparedness, MSMEs may find opportunities for market expansion, product innovation, or new partnerships (Pérez-López et al., 2020). Operationalization of growth opportunities is measured by the number of new products or services introduced, or new markets entered, as reported by MSMEs. Indicators include the number of MSMEs that expanded their market reach or introduced new offerings as a direct result of successfully managing risks.

External Influencing Factors

The final component of the conceptual framework includes external influencing factors that moderate the relationship between risk management strategies and risk preparedness. These external factors include the regulatory environment, access to financial services, business networks, and market conditions. These factors play a critical role in how MSMEs implement and benefit from various risk management strategies.

The regulatory environment is an essential external factor that can either facilitate or hinder the effective adoption of risk management strategies. A supportive regulatory environment provides MSMEs with the legal framework and incentives necessary to implement risk management practices (Matanda & Ndubisi, 2013). Operationalization of this factor is measured by the MSMEs' perceptions of the regulatory landscape, including how they view the complexity of regulations and the availability of government support. Indicators include MSMEs' assessments of how easy it is to comply with regulations and whether there are government programs that promote risk management.

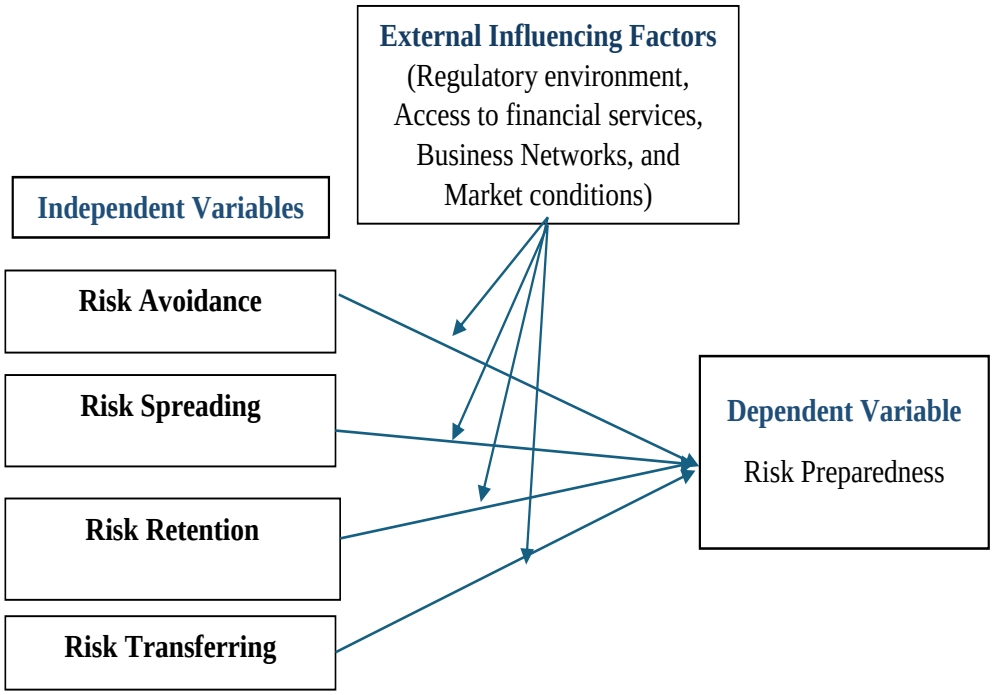
Access to financial services is another important external factor. MSMEs with access to financial products such as loans, insurance, and credit lines are better positioned to adopt risk

management strategies like risk transfer (Beck & Demirgüç-Kunt, 2006). Operationalization of access to financial services is measured by the availability and usage of financial products by MSMEs. Indicators include the number of MSMEs that report having access to insurance products and credit facilities.

Business networks refer to the relationships MSMEs maintain with other businesses, associations, or support institutions. These networks can provide MSMEs with the resources, knowledge, and partnerships needed to manage risks effectively (Phelps & Linsley, 2017). Operationalization is measured by the frequency and depth of MSMEs' engagement in formal and informal business networks. Key indicators include the number of active business associations MSMEs belong to and the frequency of knowledge-sharing activities they participate in.

Finally, market conditions such as the level of competition, customer demand, and economic stability significantly influence the risks MSMEs face and the strategies they implement. MSMEs in unstable or highly competitive markets may be more inclined to adopt certain risk strategies than those in more stable environments (Vargas-Hernández et al., 2019). Operationalization of market conditions is measured by MSMEs' perceptions of economic stability and the degree of competition they face. Indicators include reports of perceived market volatility and competitive pressure. Figure 1.1 is the graphical representation of the conceptual framework.

Figure 1.1: Conceptual Framework



Source: Author's own illustration

1.9 Operational Definitions

MSMEs: These are businesses with a workforce ranging from 1 to 100 employees. They are categorized as micro (1-9 employees), small (10-49 employees), and medium (50-100 employees) based on the number of employees (World Bank, 2021).

Risk preparedness: Also referred to as risk management preparedness, is the ability of a business to anticipate, prepare for, and respond to risks effectively. It encompasses a business's capacity to mitigate adverse effects when risks occur, ensuring operational continuity and long-term sustainability (Mazzarol & Reboud, 2020).

Risk management strategies: These are approaches or techniques used by businesses to identify, assess, mitigate, and monitor potential risks that may impact their operations (Mazzarol & Reboud, 2020).

Risk Avoidance: This strategy involves eliminating or avoiding the risk altogether by choosing not to engage in certain high-risk activities or markets (Pérez-López et al., 2020).

Risk Retention: Involves accepting certain risks, particularly those deemed manageable, and not transferring them to other parties (Dube et al., 2021).

Risk Spreading: This strategy entails diversifying activities, markets, or product lines to minimize exposure to risks (Mazzarol & Reboud, 2020).

Risk Transferring: This involves shifting the financial burden of risk to another party, often through the use of insurance or contracts (Wang et al., 2021).

1.10 Ethical Considerations

The study was undertaken exclusively for academic purposes, with a paramount commitment to maintaining the confidentiality and privacy of the participating MSMEs. Rigorous ethical considerations were adhered to throughout the research process to ensure that sensitive information from respondents remained secure and was utilized solely for the intended research objectives.

As an essential ethical practice, explicit informed consent was obtained from all participating MSMEs. The consent process involved transparent communication about the purpose of the study, the nature of the data to be collected, and assurances of confidentiality. Respondents were made aware of their rights and had the option to withdraw from the study at any point without facing any consequences.

To uphold confidentiality and protect the identity of the participating MSMEs, individual names were deliberately excluded during the data presentation and analysis phases. Instead, the study used aggregate data and statistical analyses to derive meaningful insights without compromising the anonymity of the respondents. This approach ensured that the research findings were presented in a manner that respected the privacy concerns of the participants.

The study drew upon a diverse range of sources to gather relevant information, including case studies, research articles, academic journals, reputable magazines, government publications, and pertinent surveys. Proper acknowledgment and citation of these sources were integrated into the main body of the study, providing due credit to the contributors of the knowledge base that informed the research. This practice aligned with academic integrity and ethical standards, acknowledging the intellectual contributions of others and promoting transparency in the research process.

Finally, before beginning the study, approval was sought and obtained from the University of Zambia Ethics Committee to ensure that the research adhered to ethical standards and guidelines. The committee's approval was crucial to ensure that the study was ethically sound and aligned with the university's policies on conducting research involving human subjects.

1.11 Chapter Summary

This chapter has established the foundation for the research by outlining the importance of MSMEs in Zambia and the challenges they face in terms of risk management. It highlighted the problem of insufficient risk management preparedness among MSMEs in LCBD and the need for effective strategies to enhance their resilience. The study's aim and objectives were clearly defined, and the significance of the research for stakeholders such as business owners and policymakers was emphasized. The chapter also provided a detailed discussion of the theoretical and conceptual frameworks, as well as operational definitions for key terms. These elements will guide the study and help address the research questions in subsequent chapters.

CHAPTER 2

LITERATURE REVIEW

2.0 Introduction

This chapter provides a comprehensive review of existing literature relevant to this. The chapter begins by defining MSMEs and exploring their sectoral involvement, before examining their contributions to economic development. It then highlights the various risks that MSMEs face, emphasizing the importance of risk management preparedness as a strategic response to these challenges. The chapter also discusses empirical literature on risk management strategies, outlining the diverse approaches adopted by MSMEs to mitigate risks. Lastly, the chapter draws on lessons from the reviewed literature, reflecting on the key insights gained and their implications for the study at hand. By synthesizing various studies, this chapter sets the stage for the research questions and objectives of the dissertation.

2.1. Defining Micro, Small, and Medium Enterprises

Various literature on definition of SMEs revealed that there is no universally accepted definition of SMEs, as its definition varies from country to country (Mutula and Brakel, 2006). According to Garikai (2011), SMEs are defined by number of workers employed, capital employed and sales turnover. Various organizations, institution and bodies define SMEs differently depending on the purpose, objective or use.

MSMEs encompass a diverse range of businesses characterized by their size, workforce, and financial metrics. In terms of workforce, the Organization for Economic Co-operation and Development (OECD) identify micro-enterprises as entities with fewer than 10 employees, while small enterprises typically fall within the 10 to 50 employee range. Medium enterprises, on the other hand, generally employ between 51 and 250 individuals (Vargas, 2020). According to Wach (2015), the European Union classify micro enterprises as entities employing between 0-9 people, small enterprise as entities employing between 10-99 people, and medium enterprise as those employing between 100-499 people.

Further, in the European Union, the classification of enterprises into Micro, Small, and Medium-sized categories is determined by specific annual turnover thresholds. Micro-enterprises, the smallest in scale, are characterized by an annual turnover not exceeding €2 million. Moving up the scale, Small enterprises are identified by an annual turnover that does

not surpass €10 million. At the next tier, Medium enterprises fall into the category with an annual turnover not exceeding €50 million (Mendoza, 2015).

In Zambia, the classification of MSMEs involves a nuanced definition based on three distinct criteria. The first criterion is total investment in equipment, where Micro Enterprises are identified by a total investment ranging from K1 to K80,000. This range is tailored to businesses with relatively modest initial capital requirements. Small Enterprises are characterized by a higher total investment falling within the range of K80,001 to K200,000, signaling a slightly more substantial financial scale compared to micro-enterprises. Further, Medium Enterprises are designated based on a total investment ranging from K200,001 to K500,000, positioning them with a more substantial initial capital investment, bridging the gap between smaller-scale businesses and larger enterprises (ZDA, 2015).

The second criterion for classification of MSMEs in Zambia revolves around annual sales turnover. Micro Enterprises, with an annual sales turnover between K1 and K150,000, are defined by a modest financial activity characteristic of businesses at the micro-level. Small Enterprises, with an annual sales turnover ranging from K150,001 to K300,000, exhibit a higher level of financial activity compared to micro-enterprises. Meanwhile, Medium Enterprises are designated by an annual sales turnover between K300,001 and K800,000, reflecting a more significant financial scale compared to both micro and small enterprises (ZDA, 2015).

Table 2.1: Definitions of MSMEs in Zambia

Category	Micro Enterprise	Small Enterprise	Medium Enterprise
Total Investment (equipment)	K1- K80,000	K80,001 - K200,000	K200,001- K500,000
Annual Sales Turnover	K1- K150,000	K150,001 - K300,000	K300,001 - K800,000
Workers	≤10	11-50	51 -100

Source: ZDA,2015

The third dimension of classification considers the number of employees. Micro Enterprises are identified by a workforce of up to 10 employees, emphasizing the small-scale employment characteristic of micro-businesses. Small Enterprises, with a workforce ranging from 11 to 50 employees, exhibit a moderate level of employment compared to micro-enterprises. Finally,

Medium Enterprises, with a workforce ranging from 51 to 100 employees, indicate a more substantial employment base compared to their smaller counterparts. Table 2.1 shows the various definitions of MSMEs in Zambia (ZDA, 2015).

2.2. Sectoral Involvement of MSMEs

Globally, MSMEs are dynamic players in diverse sectors, contributing significantly to economic development through a range of business activities. In the retail and trade sector, MSMEs operate grocery stores, clothing boutiques, and small-scale shops, playing a pivotal role in local commerce and providing essential goods and services to communities (Chundu et al., 2020). MSMEs are prevalent in the food and beverage industry, encompassing restaurants, cafes, and catering services. These enterprises contribute to the local culinary landscape, fostering a vibrant hospitality sector (Gade, 2018).

Additionally, some MSMEs engage in manufacturing and production, producing handmade crafts or small-scale industrial goods, thereby contributing to local production and supply chains (Boateng et al., 2019). Services constitute a significant domain for MSMEs, including businesses offering consulting, accounting, legal advice, marketing, and IT services. Such enterprises play a crucial role in supporting other businesses and individuals, contributing to the growth of various industries. Agriculture and agribusiness also feature prominently, with MSMEs involved in small-scale farming, food processing, and agro-based industries that contribute to the agricultural value chain (Gyimah & Adeola, 2021).

In the tourism and hospitality sector, MSMEs such as small hotels, guesthouses, tour operators, and travel agencies play a vital role in promoting local attractions and providing accommodation and travel services. MSMEs are also present in the health and wellness sector, including small clinics, pharmacies, wellness centers, and fitness studios, contributing to local healthcare provision and community well-being (Gade, 2018).

In construction and real estate, MSMEs offer services like carpentry, plumbing, and electrical work, while others engage in small-scale real estate activities, such as property development and leasing. With the advent of technology, MSMEs contribute to innovation in sectors like software development, app creation, and digital marketing, driving technological advancements and participating in the growth of the digital economy (Gyimah & Adeola, 2021).

Artisanal and creative industries also feature prominently among MSMEs, encompassing artists, craftsmen, and designers. These enterprises produce unique and handmade products, contributing to cultural and creative expression within local communities. The nature of businesses in which MSMEs engage is thus characterized by diversity and adaptability, reflecting the entrepreneurial spirit that defines these enterprises across various sectors of the economy (Gade, 2018).

In Zambia, MSMEs undertake diverse business activities, including manufacturing, services, trading, and mining. Within the manufacturing sector, MSMEs in Zambia exhibit remarkable diversity. They are actively involved in the production of textile products, showcasing a range of locally crafted fabrics. Carpentry and other wood-based businesses contribute to the creation of furniture and related items, highlighting the craftsmanship of these enterprises. The sector also encompasses light engineering and metal fabrication, essential for the production of machinery and metal-based products. Food processing, the manufacturing of leather products, handcrafts, ceramics, and essential oils, as well as the processing of semi-precious stones, collectively underline the creativity and versatility of MSMEs in meeting various market demands (Nuwagaba, 2015).

The trading sector witnesses the active participation of MSMEs in facilitating commerce and trade. They engage in the distribution of consumable products, from daily essentials to specialized items, ensuring the availability of diverse goods. Industrial product trade caters to the needs of various sectors, while the distribution of agricultural inputs supports the agricultural value chain. The inclusion of printing services emphasizes the role of MSMEs in providing essential services related to documentation and promotional materials, contributing significantly to the business ecosystem (Kaira, 2013).

The services sector reflects the broad spectrum of offerings by MSMEs in Zambia, illustrating their adaptability to meet diverse needs. From restaurants and food production, contributing to the local culinary scene, to hair salons and barbershops providing essential grooming services, MSMEs play a crucial role in daily life. Their involvement in transportation, encompassing both passengers and goods transport, showcases their logistics capabilities (Mwaanga, 2014). Additionally, MSMEs contribute to telecommunications services, financial services, business centers, cleaning services, guest houses, and building and construction. This diverse service-oriented engagement underscores the adaptability and versatility of MSMEs to cater to the multifaceted needs of the population (Ilubala, 2023).

Finally, the mining sector sees the active participation of MSMEs in small-scale mining and quarrying activities. This reflects their contribution to the extraction industry, emphasizing their role in the sustainable utilization of Zambia's mineral resources (Nuwagaba, 2015). Table 2.2 offers an overview of the industries in which MSMEs in Zambia participate.

Table 2.2: Business Industries of MSMEs in Zambia

NATURE OF INDUSTRY	NATURE OF BUSINESS
1.Manufacturing	1.Textile products
	2.Carpentry and other wood-based business
	3.Light Engineering and Metal fabrication
	4.Food processing
	5.Leather products
	6.Handcrafts
	7.Processing of semi-precious stones
	8.Ceramics
	9.Essential oils
2.Trading	1.Consumable products
	2.Industrial Products
	3.Agricultural inputs
	4.Printing
3.Services	1.Restaurants and Food production
	2.Hair Salons and Barbershops
	3.Passengers and Goods Transport
	4.Telecommunications services
	5.Financial services
	6.Business centers
	7.Cleaning services
	8.Guest houses
	9.Building and construction
4.Mining	1.Small scale mining
	2.Small scale quarrying

Source: ZDA, 2007

2.3. MSMEs' Contribution to Economic Development

MSMEs constitute indispensable pillars of economic development, leaving an indelible impact on both local and global scales. A primary avenue through which MSMEs foster economic development is by acting as significant engines of employment. By providing diverse opportunities for a wide spectrum of workers, including both skilled and unskilled individuals, MSMEs play a pivotal role in reducing unemployment rates and enhancing overall economic

well-being. MSMEs provide 65 percent and 70 percent of total employment in high income and middle-income countries respectively (Tekola & Gidey, 2019).

Furthermore, MSMEs contribute to income generation, thereby making a significant impact on poverty alleviation through empowering individuals and households. As MSMEs create diverse employment opportunities, individuals gain access to sources of income, fostering financial independence and stability. The income generated through MSME engagement serves as a catalyst for improved living standards, enabling households to meet basic needs, invest in education, and access essential healthcare services (Nursini, 2020). In this way, MSMEs act as crucial agents of positive socio-economic change by directly addressing poverty at its roots through the provision of sustainable income streams for individuals and families.

MSMEs wield a considerable influence on the Gross Domestic Product (GDP) of countries, collectively shaping the economic output through their various activities such as production, trade, and services. For higher and middle-income countries, MSMEs generate about 55 percent and 60 percent of GDP respectively. MSMEs' dynamic and innovative nature positions them as drivers of entrepreneurship and innovation, fostering economic diversification and resilience (Endris & Kassegn, 2022). Additionally, their deep-rooted presence in local communities enhances local economic development by creating business networks, supporting other local enterprises, and participating in community development projects (Tekola & Gidey, 2019).

Participation in supply chains, both at the local and global levels, characterizes another vital role played by MSMEs. Serving as suppliers to larger enterprises, they contribute to the robustness and flexibility of supply networks, ultimately fortifying economic systems and promoting sustainable practices (ESCAP, 2021). Engaging in international trade, MSMEs bolster export earnings, stimulate foreign exchange inflows, and elevate the competitiveness of national economies. The adaptability and resilience inherent in MSMEs enable them to navigate economic challenges, further contributing to overall economic stability (Abe & Proksch, 2017).

Several nations have experienced the influence of MSMEs on their economic development. MSMEs play a pivotal role in driving the economic growth of numerous Asian nations. In China, for example, SMEs significantly contribute to the national product, constituting 40 percent of the growth (Mei et al., 2019). Indonesia, on the other hand, relies on MSMEs for extensive labor absorption, with approximately 73.53 million Indonesian workers engaged in

MSMEs, surpassing the 28.52 million individuals employed in modern and large corporate entities (Tambunan, 2020). Similarly, the substantial contribution of SMEs is widely recognized in other Asian countries like Japan and Korea, where they play a crucial role in job creation, poverty reduction, and the overall improvement of welfare (Yoshino & Taghizadeh-Hesary, 2018).

Coming to Africa, specifically in Nigeria, MSMEs play a pivotal role in propelling the country's economic development across key dimensions. One of their primary contributions lies in substantial employment generation, acting as major employers in both urban and rural areas. By providing diverse job opportunities, MSMEs contribute not only to economic productivity but also to poverty alleviation and improved socio-economic well-being (Yahaya et al., 2016). Beyond employment, MSMEs are instrumental in driving overall economic growth and development in Nigeria. Operating in diverse sectors, including manufacturing, services, and trade, MSMEs contribute to the diversification of economic activities. This diversification enhances the resilience of the Nigerian economy, ensuring adaptability to the ever-evolving dynamics of the global economic landscape (Mpi, 2019).

Moreover, MSMEs serve as critical intermediaries in the marketing of goods and services, fostering trade at both local and national levels. Their activities create dynamic marketplaces, promoting competition, innovation, and efficiency. This entrepreneurial spirit not only benefits individual enterprises but also contributes to the vibrancy of the overall economy (Oseni & Oseni, 2015).

Recognizing the pivotal role of MSMEs, the Nigerian Government has strategically embraced these enterprises as key drivers of economic development. Policy initiatives are being formulated to provide support and create an enabling environment for MSMEs, addressing challenges and maximizing their potential as engines of economic growth, job creation, and poverty reduction. The government's focus on MSMEs aligns with broader national development goals, underscoring their importance in shaping Nigeria's economic landscape (Onuorah, 2022).

In Zimbabwe, MSMEs contribute about $8.58 billion to the nation's GDP, providing employment for more than 5.9 million individuals, which accounted for over 75 percent of the total workforce of 7.8 million. Additionally, MSMEs represent over 70 percent of the registered taxpayers in the Zimbabwe Revenue Authority database, despite contributing only 20 percent to the overall tax revenue (Hungwe & Kepeng, 2023). This significant presence is reflected in

the establishment of dedicated MSME desks in all commercial banks and retail enterprises across Zimbabwe, underscoring the pivotal role that small businesses play in the local market.

In Zambia, MSMEs play a vital role in shaping the economic landscape. Through their diverse economic activities, these enterprises significantly contribute to the country's overall development. One of the key aspects of their impact is evident in the substantial employment opportunities they provide. With a considerable portion of the Zambian workforce finding employment within the MSME sector, these enterprises contribute not only to individual livelihoods but also to the reduction of unemployment rates, fostering social and economic well-being (Ilubala, 2023).

In terms of economic output, MSMEs are major contributors to Zambia's GDP. Their presence and activities across various sectors, including manufacturing and services, foster GDP growth and stability. Moreover, the diversity of economic activities undertaken by MSMEs plays a crucial role in the overall economic resilience of the country, reducing dependence on specific sectors and promoting a more balanced and sustainable economic structure (Simuchimba, 2019).

MSMEs serve as hubs of innovation and entrepreneurship, introducing new ideas, products, and services to the market. This dynamism contributes to the overall competitiveness of the Zambian economy, encouraging a culture of creativity and adaptability. Additionally, the poverty-alleviating impact of MSMEs cannot be overstated. By providing income-generating opportunities, these enterprises uplift the standard of living for individuals and households, particularly in local communities (Mwamba et al., 2022).

The growth of local markets is another significant contribution of MSMEs. Their presence ensures vibrant marketplaces, fostering healthy competition and providing consumers with a diverse range of goods and services. Collectively, though individually smaller in scale, MSMEs contribute substantially to the national tax base, supporting government initiatives and public services (Nuwagaba, 2015).

MSMEs also play a crucial role in rural development. Operating in rural areas, they contribute to the economic development of these regions, addressing regional disparities and promoting a more balanced development across the country (Mwaanga, 2014). In essence, the multifaceted contributions of MSMEs make them integral to fostering a robust and inclusive economy in Zambia that benefits both urban and rural communities.

2.4. Risks Faced by MSMEs

Risk is a fundamental concept that encapsulates the inherent uncertainty and unpredictability of events within various contexts, especially in the dynamic landscape of business. It represents the possibility of an event occurring that can have either positive or negative outcomes. In the realm of business, risks can emanate from multifarious sources, constituting a complex web of potential challenges and opportunities (Sadgrove, 2016).

The sources of risk for an MSME are diverse, spanning cash flow, human capital, key personnel losses, and many others. First, cash flow risk is a critical concern for MSMEs, as these enterprises often operate with limited liquidity. Fluctuations in revenue, delayed payments, or unexpected expenses can disrupt cash flow, potentially hindering daily operations, hampering growth, and even leading to financial distress (Harris & Roark, 2019). Second, reputational risk is the potential harm to the image and standing of an MSME. Negative publicity, customer dissatisfaction, or ethical lapses can tarnish the reputation built over time. This risk is particularly crucial in the age of social media, where information spreads rapidly, impacting customer trust and stakeholder relationships (Rayner, 2004).

Third, MSMEs are susceptible to supply chain disruptions, including raw material shortages, transportation issues, or supplier failures. Such disruptions can lead to production delays, increased costs, and a decline in customer satisfaction. Robust supply chain management is essential to mitigate these risks (Bhattacharya et al., 2023). Fourth, various factors, such as natural disasters, accidents, or unforeseen events, pose business interruption risks to MSMEs. These disruptions can halt operations, leading to financial losses. Having contingency plans, backup systems, and insurance coverage helps in mitigating the impact of such interruptions (Wieczorek-Kosmala et al., 2021).

Fifth, MSMEs often rely on a few key individuals. The departure or loss of key personnel can pose a significant risk, impacting operations, decision-making, and overall organizational stability. Succession planning, talent development, and retention strategies are crucial in mitigating this risk (Panigrahi & others, 2012). Sixth, Changes in regulations, non-compliance with industry standards, or legal issues can expose MSMEs to regulatory and compliance risks. These risks may result in fines, legal battles, or the need for sudden operational adjustments. Staying informed and implementing robust compliance measures is essential (Rayner, 2004).

Seventh, for MSMEs involved in innovation or unique product development, protecting intellectual property is vital. The risk of infringement or unauthorized use of intellectual

property can impact competitiveness and market position. Implementing intellectual property strategies and legal safeguards helps mitigate this risk (Panigrahi & others, 2012). Eighth, physical assets, such as equipment, facilities, or inventory, are susceptible to damage, theft, or obsolescence. MSMEs face risks related to the maintenance and protection of these assets. Adequate insurance coverage and preventive maintenance are crucial risk management measures (Bhattacharya et al., 2023).

Ninth, MSMEs heavily rely on their workforce. Human capital risks include talent shortages, skill gaps, or employee dissatisfaction. Investing in employee development, fostering a positive work environment, and implementing effective HR practices can mitigate these risks (Mishra, 2014). Lastly, fluctuations in interest rates can impact MSMEs with variable-rate loans or financial instruments. Rising interest rates can increase borrowing costs, affecting profitability. Managing financial exposure through fixed-rate financing or hedging strategies helps mitigate interest rate risks (Muliadi et al., 2020).

2.5. Risk Management Processes of MSMEs

Risk management is a comprehensive and systematic approach employed by MSMEs to navigate the complexities of uncertainty and potential hazards in the pursuit of their business objectives. It encompasses a structured and strategic process designed to identify, assess, prioritize, and mitigate risks effectively. The overarching goal is to develop a proactive and responsive framework that not only safeguards the MSME against potential threats but also leverages opportunities for sustainable growth (Balasubramanian, 2022).

Generally, the first phase of risk management involves the identification of potential risks across various facets of the business. These risks can emanate from internal processes, external market dynamics, regulatory changes, technological disruptions, or other sources. Once identified, these risks undergo a thorough assessment to gauge their likelihood of occurrence and the potential impact on the MSME's objectives (Borghesi & Gaudenzi, 2012).

Following the assessment, risks are prioritized based on their significance and potential consequences. This step enables MSMEs to focus their resources and attention on addressing the most critical risks that could impact their operational efficiency, financial stability, or strategic goals. The prioritization process is integral to resource allocation and effective risk mitigation (Haimes, 2005).

Mitigating risks involves the development and implementation of strategies aimed at either reducing the likelihood of the risk occurring or minimizing its impact when it does. Strategies may include implementing preventative measures, creating contingency plans, diversifying operations, or utilizing financial instruments to hedge against specific risks. The effectiveness of these strategies is continually monitored and adjusted to align with evolving business dynamics (Borghesi & Gaudenzi, 2012).

The aforementioned steps are general in nature. Most MSMEs adopt their own steps for instance, Klemen & Biffl (2004) argue that most MSMEs prefer a five-step risk management process namely: risk identification, risk analysis, risk evaluation, risk treatment, and risk monitoring (IAETM). Establishing the context is the foundational step in crafting a robust risk management process for MSMEs. This phase revolves around gaining a comprehensive understanding of the MSME's business environment, including its objectives, stakeholders, and the regulatory landscape. By defining this context, MSMEs lay the groundwork for a tailored risk management strategy that aligns with their specific circumstances.

Following context establishment, the next step involves identifying potential risks. MSMEs meticulously examine both their internal and external environments to pinpoint factors that could pose threats or opportunities. This includes a detailed assessment of market dynamics, operational processes, financial vulnerabilities, and external elements like economic shifts or regulatory changes. The goal is to create a comprehensive inventory of potential risks.

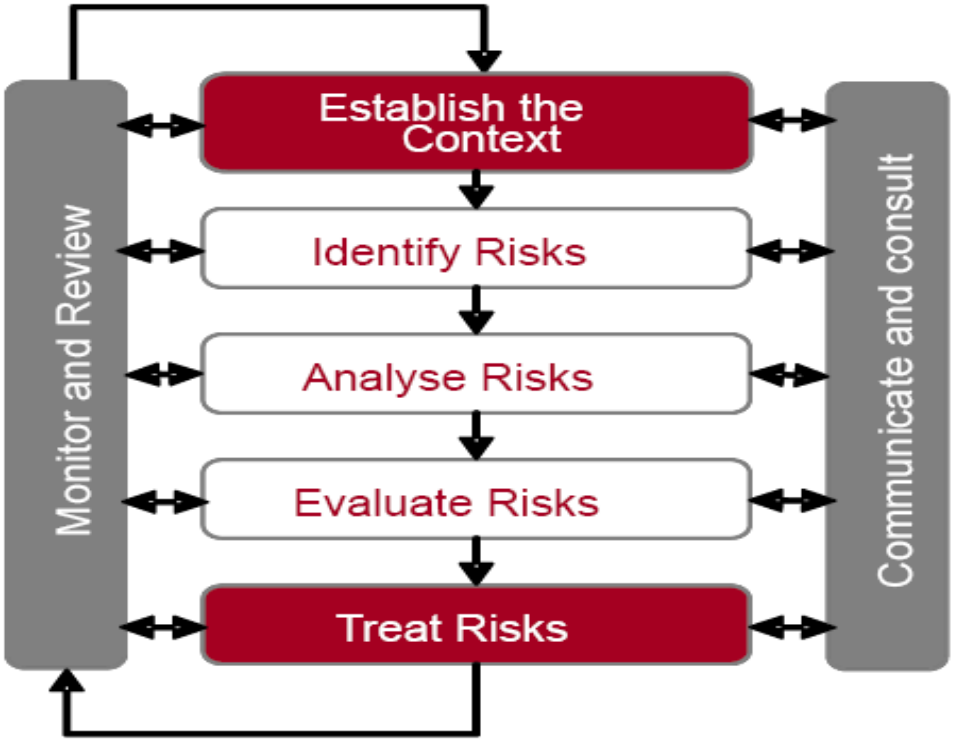
With identified risks in hand, MSMEs embark on a thorough analysis to understand the nature, magnitude, and potential impact of each risk. This analysis involves evaluating the likelihood of occurrence and the severity of consequences. By conducting a detailed risk analysis, MSMEs gain valuable insights into the dynamics of their risk landscape, enabling them to prioritize their focus on high-impact risks.

After analysis, MSMEs proceed to evaluate the identified risks. This step involves determining the tolerability of each risk based on predefined criteria. Risks are categorized into acceptable, tolerable with mitigation, or unacceptable. MSMEs weigh the potential benefits against the drawbacks, facilitating informed decision-making on whether to accept, mitigate, transfer, or avoid specific risks.

The final step involves devising and implementing risk treatment strategies. MSMEs develop proactive measures to manage, mitigate, or exploit identified risks. This may involve

implementing internal controls, adopting insurance coverage, revising operational processes, or diversifying business activities. The aim is to enhance resilience, capitalize on opportunities, and safeguard against potential adverse outcomes. Throughout this process, continual monitoring, review, as well as open communication and consultation are integral components at each stage. This process is illustrated in figure 2.1.

Figure 2.1: Risk Management Process



Source: Klemen & Biffl (2004)

Despite the steps an MSME take during risk management, effective risk management not only fortifies the MSME against potential adversities but also positions it to make informed and strategic decisions. By fostering a risk-aware culture, MSMEs can proactively respond to emerging challenges and capitalize on opportunities, enhancing overall performance and resilience (Bhattacharya et al., 2023). Additionally, risk management contributes to safeguarding the MSME's assets, maintaining stakeholder confidence, and supporting sustainable business practices in an ever-evolving and dynamic business environment (Panigrahi et al., 2012).

2.6. Significance of Risk Management Preparedness to MSMEs

Risk management preparedness stands as a testament to an MSME's foresight and proactive stance in identifying, assessing, and responding to potential risks effectively. This comprehensive approach involves the establishment of robust risk management frameworks, the formulation of policies, and the implementation of procedures that collectively fortify an MSME against uncertainties. It extends beyond mere readiness, delving into the creation of contingency plans, crisis response strategies, and the cultivation of a pervasive risk-aware culture within the organizational fabric (Apasrawirote & Yawised, 2024).

MSMEs that exhibit high levels of risk management preparedness not only equip themselves to address known risks but also showcase adaptability in the face of unforeseen challenges. This adaptability is sustained through a continuous process of monitoring, regular risk assessments, and an unwavering commitment to refining and improving existing risk management processes. The dynamism inherent in preparedness ensures that MSMEs remain agile and responsive to emerging threats, fostering an environment of resilience and innovation (Cueto et al., 2022).

The significance of risk management preparedness for MSMEs is accentuated due to the inherent vulnerabilities these enterprises confront. MSMEs often operate with limited resources, making them more susceptible to the impact of external events and market fluctuations. A proactive approach to risk management preparedness empowers MSMEs to systematically identify potential threats, judiciously allocate their resources, and formulate adaptive strategies to navigate uncertainties. This proactive stance not only contributes to the resilience of MSMEs but also plays a pivotal role in fostering their sustainability and fostering a conducive environment for growth (Kuruppu et al., 2013).

2.7. Empirical Literature

2.7.1. Risk Management Strategies

Numerous studies have focused on identifying the risk management strategies utilized by MSMEs, highlighting the diverse approaches these businesses employ to navigate challenges. Woldie et al. (2018) conducted research on Ethiopian MSMEs, revealing that many enterprises employ a combination of risk avoidance and risk retention strategies to mitigate potential threats. Their findings suggest that MSMEs often avoid high-risk ventures, favoring more stable market segments, which allows them to maintain operational security in uncertain environments.

Similarly, Ejiogu and Uche (2018) found that small enterprises frequently adopt risk retention by accepting minor operational risks they can manage without incurring significant costs. This strategy enables them to maintain operational continuity in less volatile markets while remaining agile in response to changing circumstances. Their research underscores the importance of a calculated approach to risk retention, emphasizing that understanding the limits of risk tolerance is essential for MSMEs.

In the context of risk spreading, Oyelaran-Oyeyinka (2018) highlights that many MSMEs diversify their product offerings to minimize exposure to market fluctuations. By engaging in multiple business lines, these enterprises aim to reduce the risk associated with relying on a single source of income. This diversification strategy not only stabilizes income streams but also enhances resilience against market volatility. Complementarily, Kaur and Singh (2019) noted that MSMEs in India often employ risk spreading through geographic diversification, entering new markets to mitigate risks associated with regional economic downturns.

Barlow and Kivleniece (2016) explored the role of insurance as a risk transferring strategy among MSMEs. Their research indicates that while some MSMEs have begun to embrace insurance to mitigate risks associated with property and liability, the uptake remains limited due to perceptions of high costs and lack of understanding. This finding aligns with the work of Abor and Adjasi (2007), who observed that many MSMEs in Ghana were hesitant to invest in insurance due to perceived complexity and financial constraints, which ultimately hindered their risk management capabilities.

Furthermore, Mazzarol and Reboud (2020) identified that many MSMEs use informal networks and community relationships as risk management strategies. These networks provide vital support and information, allowing businesses to navigate risks more effectively through collective problem-solving. The study emphasizes that building strong community ties can enhance resilience among MSMEs, particularly in times of crisis.

A comprehensive study by Kinyua et al. (2020) examined Kenyan MSMEs and found that a significant number employed risk avoidance strategies, particularly in relation to regulatory compliance. By steering clear of complex regulatory environments, these enterprises were able to focus on simpler operational practices, thereby minimizing the risk of legal penalties and operational disruptions.

In another context, a study by Musah et al. (2021) investigated risk management practices among MSMEs in Nigeria, revealing that many businesses utilized risk spreading through collaborative ventures. By forming partnerships with other firms, these enterprises were able to share resources and reduce individual exposure to risks, enhancing overall stability within their operations.

Additionally, Adomako et al. (2020) highlighted that some MSMEs in Ghana are increasingly adopting technology-driven risk management strategies, using software and digital tools to monitor market trends and assess potential risks in real-time. This approach allows businesses to make informed decisions and respond swiftly to emerging threats, showcasing the evolving nature of risk management in the MSME sector.

A comparative study by Shiu and Walker (2020) explored the differences in risk management practices between developed and developing countries. The findings indicated that while MSMEs in developed economies are more likely to adopt formal risk management frameworks, those in developing countries often rely on informal strategies, such as personal networks and experiential learning, to navigate risks.

A study by Agyapong et al. (2019) emphasized the importance of government support in fostering effective risk management practices among MSMEs in Ghana. Their research found that government initiatives aimed at improving financial literacy and access to insurance significantly influenced the adoption of risk management strategies, highlighting the need for a supportive policy environment to enhance MSME resilience.

2.7.2. Effectiveness of Risk Management Strategies

The effectiveness of different risk management strategies among MSMEs has been a significant focus of empirical investigation. Various studies have compared these strategies to determine which are most effective in enhancing risk preparedness and resilience. For instance, Mazzarol and Reboud (2020) assessed the outcomes of various risk management approaches and found that MSMEs employing risk spreading exhibited greater resilience during economic downturns. These firms were better positioned to absorb shocks effectively, as their diversified portfolios allowed them to offset losses in one area with gains in another, thereby stabilizing their overall performance.

In contrast, research by Pérez-López et al. (2020) highlights potential drawbacks of risk avoidance. While avoiding certain high-risk activities can safeguard against immediate threats,

it may also hinder long-term growth and innovation. Their findings suggest that although risk avoidance may offer short-term benefits, it can result in missed opportunities that could strengthen an MSME's competitive position in the market. This tension between immediate safety and long-term potential is critical for MSMEs to navigate in their strategic planning.

Moreover, Dube et al. (2021) investigated the implications of risk retention during the COVID-19 pandemic, noting that MSMEs that relied solely on this strategy without adequate contingency planning faced significant operational challenges. Their findings emphasize that while risk retention can be a viable approach for managing minor risks, it becomes perilous during crises when unexpected disruptions occur. The study highlights the necessity of integrating proactive risk management strategies rather than relying exclusively on retention.

The role of risk transferring strategies, particularly insurance, is also crucial. Wang et al. (2021) found that MSMEs that effectively utilized insurance demonstrated enhanced preparedness and reduced financial losses during unforeseen events. However, they also highlighted the low uptake of insurance among MSMEs, attributing this to perceived costs and limited financial literacy. This underscores the need for targeted interventions to promote risk transferring strategies within the MSME sector.

Expanding on these findings, a study by Beck and Demirgüç-Kunt (2006) noted that access to financial products, including insurance, is pivotal for MSMEs in mitigating risks. Their research indicates that financial inclusion is positively correlated with effective risk management practices, emphasizing that MSMEs with better access to financial tools are more capable of transferring risks successfully.

In a study by Phelps and Linsley (2017), the authors explored the effectiveness of collaborative risk management among MSMEs in the United Kingdom. Their findings suggested that businesses participating in collaborative networks to share risks experienced fewer disruptions and were better prepared for economic uncertainties compared to those operating in isolation. This collaborative approach underscores the value of community engagement in enhancing risk resilience.

A study by Ritchie and Brindley (2007) examined the significance of crisis management strategies among MSMEs, particularly in the hospitality sector. Their research indicated that those enterprises with well-defined crisis management plans, which included risk transferring and contingency strategies, were able to recover more swiftly from adverse events than those

without such frameworks in place. This study highlights the importance of proactive measures in fostering long-term resilience.

Additionally, a study by Idris et al. (2021) focused on risk retention strategies among SMEs in Malaysia, concluding that businesses with established risk retention frameworks, such as emergency funds or reserves, showed greater financial stability during economic downturns. The research advocates the importance of strategic planning in risk retention to cushion against potential shocks.

Furthermore, a comparative analysis by Akinboade et al. (2018) demonstrated that MSMEs employing risk spreading through geographic and product diversification significantly outperformed their peers that did not. The study found that those who diversified were less affected by local economic shocks, reinforcing the effectiveness of spreading risk across various dimensions.

The impact of external factors on the effectiveness of risk management strategies was also highlighted by Matanda and Ndubisi (2013), who found that regulatory environments play a crucial role in shaping the effectiveness of risk management among MSMEs. In regions with supportive regulations, firms were more inclined to adopt comprehensive risk management strategies, resulting in better overall performance.

Lastly, a study by Hmoud and Abuhashesh (2021) explored the role of technology in enhancing risk management effectiveness. Their findings suggested that MSMEs that integrated digital tools for monitoring and managing risks were more adaptable to changes and disruptions, demonstrating improved resilience in volatile market conditions.

A table summarizing the empirical literature review is presented in Appendix I.

2.8. Lessons Learnt from the Reviewed Literature

The reviewed literature highlights several key lessons that are crucial for understanding how businesses navigate risks and uncertainties. Firstly, it is clear that risk management preparedness is essential for the sustainability and growth of MSMEs. These businesses, often characterized by limited resources and exposure to external shocks, benefit significantly from having a proactive approach to identifying and mitigating potential risks. The literature indicates that MSMEs with robust risk management frameworks, which include contingency plans, crisis management strategies, and a risk-aware culture, tend to exhibit greater resilience in the face of challenges. This preparedness not only enables them to manage known risks but

also helps them adapt to unforeseen circumstances, making them more agile and responsive to changes in their operating environment.

Another key lesson is the diversity of risk management strategies employed by MSMEs. These strategies range from risk avoidance, where businesses steer clear of high-risk activities, to risk retention, where businesses accept certain risks they can manage. The choice of strategy often depends on the nature of the business, its resources, and its risk tolerance. For example, some MSMEs focus on avoiding high-risk ventures by targeting stable market segments, while others adopt risk retention strategies, managing smaller operational risks without incurring significant costs. The effectiveness of these strategies varies, with some businesses achieving greater stability by diversifying their products or entering new markets to spread risks.

Furthermore, the importance of informal networks and community relationships as part of risk management is another critical insight from the literature. Many MSMEs leverage these informal networks to share resources, solve problems collectively, and access vital support during times of crisis. These networks often provide a level of security and resilience that formal risk management tools cannot fully replace. The community's role in MSMEs' survival and adaptation underscores the value of social capital in navigating economic and operational challenges.

The literature also reveals the evolving nature of risk management practices, especially with the increasing integration of technology. More MSMEs are adopting digital tools and technologies to monitor market trends, assess risks, and make informed decisions. This technological adoption enhances their ability to respond to emerging risks in real-time, improving overall preparedness and reducing the vulnerability of businesses in volatile environments.

However, there are challenges that MSMEs face when adopting formal risk management strategies, such as insurance. Despite its potential to mitigate risks, many MSMEs remain hesitant to invest in insurance due to perceived high costs and a lack of understanding. This reluctance underscores the need for more accessible and affordable risk management tools for MSMEs, particularly in developing economies.

Lastly, the reviewed literature points to the crucial role of external factors such as regulatory environments and government support in shaping the effectiveness of risk management strategies. In regions with supportive regulatory frameworks, MSMEs are more likely to adopt

comprehensive risk management practices. Government initiatives aimed at improving financial literacy, access to insurance, and providing tailored risk management support can significantly enhance the resilience of MSMEs.

In summary, the reviewed literature provides valuable insights into the diverse and evolving risk management practices of MSMEs. It highlights the importance of proactive preparedness, diverse strategies, community support, and technological integration, while also recognizing the barriers that MSMEs face in fully embracing formal risk management tools.

2.9. Chapter Summary

This literature review began with a detailed definition of MSMEs, highlighting their importance to national economies and their classification based on investment, sales turnover, and number of employees. The sectoral involvement of MSMEs was discussed, illustrating the variety of industries in which they are engaged, from agriculture to services, and their significant contributions to economic growth, employment, and poverty reduction. The chapter also explored the numerous risks faced by MSMEs, including financial, market, operational, and external risks such as political instability or natural disasters. In response to these risks, MSMEs have adopted a variety of risk management strategies, including risk avoidance, retention, spreading, and transferring. The effectiveness of these strategies was analyzed, with findings suggesting that risk spreading and collaborative ventures tend to enhance MSME resilience, while risk avoidance may limit long-term growth opportunities.

Furthermore, the importance of risk management preparedness was underscored as a proactive approach to building resilience. The literature indicated that MSMEs that engage in regular risk assessments, formulate contingency plans, and foster a risk-aware culture tend to be more adaptable and capable of overcoming unforeseen challenges. Finally, the chapter drew lessons from the literature, emphasizing the need for MSMEs to balance different strategies and continuously improve their risk management frameworks. The insights gained from the reviewed studies provide a strong theoretical and empirical basis for understanding the practices of risk management preparedness and their significance for MSMEs in the LCBD. This chapter serves as a critical foundation for the study, guiding the research questions and offering a deeper understanding of the risk management practices among MSMEs.

CHAPTER 3

RESEARCH METHODOLOGY

3.0. Introduction

This chapter outlines the methodology employed in conducting the study, providing a detailed description of the processes and strategies used to collect, analyze, and interpret data. It systematically presents the research design, study area, study population, sample size, and sampling techniques adopted to ensure the representativeness and reliability of the findings. The chapter further elaborates on the data collection instruments used, the procedures followed during data collection, and the timeline over which data were gathered. Finally, it describes the instruments and methods employed for data analysis. The overall aim of this chapter is to demonstrate how the research was carefully structured to achieve the study objectives and to ensure the validity and credibility of the results.

3.1. Research Design

This study employs a cross-sectional survey research design within a quantitative research approach framework. A research design refers to the overall strategy and plan for collecting and analyzing data to answer specific research questions and achieve the objectives of a study (Williams et al., 2007). The cross-sectional design, specifically, involves collecting data from a population or a representative subset at a single point in time to examine the prevalence, characteristics, and relationships among variables (Wang & Cheng, 2020).

A cross-sectional survey was chosen because it provides a snapshot of the phenomenon under investigation — in this case, the risk management preparedness of Micro, Small, and Medium Enterprises (MSMEs) in Lusaka's Central Business District (CBD). Unlike longitudinal designs that require repeated observations over extended periods, cross-sectional studies allow for the immediate capture of data, making them more time-efficient and cost-effective (Levin, 2006). This efficiency is particularly important when working under constraints of time and resources, as is often the case in academic research.

Moreover, the study adopts a quantitative research approach, which is an empirical method involving the systematic collection and analysis of numerical data to draw statistically valid conclusions (Williams et al., 2007; Yilmaz, 2013). Quantitative research aims for objectivity, reducing the influence of researcher bias, and relies on standardized instruments to ensure

consistency across observations (Duncombe & Boateng, 2009). It facilitates the identification of patterns, relationships, and trends through the use of statistical tools, thereby providing a robust basis for making generalizations about the target population (Griffith, 2012).

Quantitative methods are particularly suited to studies like this one where the goal is to measure, quantify, and analyze various aspects of MSMEs' risk management practices. By applying structured questionnaires with predefined variables and measurement scales, the study ensures that the data collected are amenable to statistical analysis, enhancing the reliability, validity, and generalizability of the findings (Polit & Beck, 2010).

The use of a cross-sectional survey also provides baseline information that can inform future research, policy development, or interventions aimed at strengthening MSME resilience. Because findings from cross-sectional surveys are generated relatively quickly, they can be immediately applied to address current issues within the MSME sector (Mann, 2003). Additionally, the structured and standardized nature of quantitative research enhances the replicability of the study, allowing future researchers to apply the same methodology to different settings or populations and achieve comparable results (Duncombe & Boateng, 2009).

The combination of a cross-sectional survey design and a quantitative research approach offers an efficient, systematic, and scientifically rigorous method for achieving the objectives of this study. This design is best suited to provide a comprehensive understanding of the level of risk management preparedness among MSMEs in Lusaka's CBD at a single point in time.

3.2. Study Area or Site

The study was conducted in LCBD, located in the heart of Lusaka Province, Zambia's capital city. The LCBD serves as the city's primary commercial and administrative center, characterized by a high concentration of businesses, financial institutions, government offices, retail outlets, and service industries (Chikweche, 2013). It is a dynamic and densely populated area where MSMEs play a critical role in economic activity, offering employment opportunities, goods, and services to a wide range of consumers.

LCBD was chosen as the study area because it hosts a significant proportion of Zambia's MSMEs across various sectors such as retail, hospitality, financial services, information technology, and informal trade (ZDA, 2020). The dense clustering of businesses in this area provides a rich and diverse sample of MSMEs, which is essential for understanding risk management preparedness across different industries. Furthermore, MSMEs operating within

urban centers like the LCBD often face unique risks, including high operational costs, regulatory pressures, competition, and exposure to market fluctuations (ITC, 2018). Studying MSMEs within this urban context, therefore, offers valuable insights into the challenges they face and the strategies they employ to manage risks.

The selection of LCBD is also justified by its accessibility and logistical advantages for data collection. The area is relatively easy to navigate, allowing for efficient administration of questionnaires to a geographically concentrated population of MSMEs. This practical consideration aligns with best practices in research, which suggest that the accessibility of the study site is a key factor in the successful execution of fieldwork (Creswell, 2014).

In addition, Lusaka's CBD represents a microcosm of the broader economic environment faced by MSMEs in urban Zambia, making the findings from this study potentially relevant to policymakers, development practitioners, and business support organizations seeking to design interventions for MSME growth and resilience (World Bank, 2019).

3.3 Study Population

The Study population or population of study refers to the entire group that is the subject of investigation or analysis. The population represents the larger set of individuals, items, or events that share common characteristics and from which a sample is drawn for the actual study. Understanding the population is crucial for generalizing study findings to a broader context (Jensen & Rodgers, 2001).

In this study, the population encompasses all the MSMEs operating in LCBD. This includes a diverse range of businesses, such as retail shops, service providers, and manufacturing enterprises, falling within the defined MSME category. The characteristics of this population include various industries, business sizes, and operational structures that collectively contribute to the economic dynamics of the Central Business District in Lusaka.

3.4 Study Sample

The concept of a sample refers to a carefully selected subset of a larger population from which data is collected. Sampling is crucial for practical and logistical reasons, as it enables researchers to conduct studies more efficiently and within resource constraints (Fink, 2003). In instances where studying an entire population is impractical due to factors like limited time, budgetary constraints, or ethical considerations, working with a sample becomes a viable and

effective strategy. The selection of a representative sample is essential, ensuring that the characteristics of the chosen subset mirror those of the broader population (Yarkoni, 2022).

By focusing on a sample, researchers can achieve precision and accuracy in their analyses, drawing meaningful conclusions from a manageable set of observations. Additionally, using a sample aligns with ethical considerations, minimizing potential harm to participants, and expedites the research process, enabling timely responses to certain research questions. Overall, obtaining a sample strikes a balance between comprehensive data collection and the practical challenges inherent in research studies (Michelson, 2015).

Sample size, on the other hand, refers to the number of individual units or participants selected from a larger population for inclusion in a research study. It is a critical aspect of research design and is determined based on various factors, including the research objectives, desired level of precision, available resources, and statistical considerations (Fink, 2003).

The sample size plays a crucial role in the generalizability and reliability of study findings. A larger sample size generally enhances the external validity of the study, allowing researchers to make more confident generalizations from the sample to the entire population. However, increasing the sample size also comes with practical constraints, such as time, budget, and the complexity of data collection. Researchers must strike a balance when determining the sample size, ensuring that it is sufficient to detect meaningful effects or differences while also being manageable within the constraints of the study (Lakens, 2022).

The research employs Cochran's Sample Size Formula to determine the required sample size. This formula is deemed suitable for the study as it enables the calculation of an optimal sample size based on specified precision, confidence level, and the estimated proportion of the attribute within the population. It is particularly well-suited for situations involving large populations. Cochran's formula is expressed as follows:

$$n_0 = \frac{Z^2 pq}{e^2}$$

Where:

e is the desired level of precision (i.e. the margin of error);

p is the (estimated) proportion of the population which has the attribute in question;

q is 1 – p; and

The Z-value is obtained from the Z table.

Due to limited initial information on the subject, we adopt an assumption that half of the MSMEs have risk management preparedness practices in place, providing us with maximum variability (p = 0.5). Assuming a desired 95 percent confidence level and a precision of at least 5 percent plus or minus, we refer to normal tables for Z values associated with a 95 percent confidence level, which yields a Z value of 1.96, and we get:

((1.96)2 (0.5) (0.5)) / (0.05)2 = 384.16 = 385

Thus, the sample size for the study is 385 MSMEs.

3.5. Sampling Techniques

The selection of respondents in research is a crucial aspect that directly impacts the validity and generalizability of study findings. In this research, a two-step approach was adopted, incorporating both convenient sampling and random sampling to ensure a balance between practicality and representativeness.

Convenient sampling, as the initial stage of participant selection, involved choosing respondents based on accessibility, availability, and willingness to participate. This method was employed for its practicality, especially when dealing with a large and diverse population of MSMEs in LCBD. Convenient sampling allowed the researchers to efficiently identify and approach potential respondents, saving time and resources (Wagstaff et al., 2007). It is important to acknowledge that this approach may have introduced certain limitations, particularly in terms of sample representativeness. Since participants were selected based on convenience, the findings may not fully reflect the broader population of MSMEs, potentially affecting the generalizability of the results.

However, following the convenient sampling phase, the study implemented random sampling to further refine the selection of respondents and enhance sample representativeness. Random sampling is a systematic method where every individual in the population has an equal chance of being chosen. This step was essential to enhance the representativeness of the sample and mitigate the risk of selection bias (Manski, 2004).

The use of random sampling introduced an element of objectivity and minimized the potential for researcher bias in participant selection. By employing random sampling, the researchers

ensured that each MSME within the population had a fair and equal opportunity to be included in the study. This approach increased the likelihood that the sample accurately reflected the broader characteristics and diversity present in the entire population of MSMEs in the study area (Meier, 1975).

The combination of convenient and random sampling allowed the research to strike a balance between feasibility and robustness. While convenient sampling facilitated practical data collection, random sampling addressed concerns related to sample representation and generalizability. This two-step approach aimed to produce a sample that is not only accessible for data collection but also statistically sound, contributing to the overall validity and reliability of the study's findings.

3.6. Data Collection Instruments

The primary data collection instrument employed in this study was a structured survey questionnaire. A survey questionnaire is a widely used tool in research due to its efficiency in gathering large volumes of data from a broad and diverse population within a relatively short period (Kelley et al., 2003). Its structured nature allows for uniformity in the data collection process, thereby enhancing the reliability and comparability of responses across different participants.

The questionnaire was carefully designed to align with the research objectives and questions guiding the study. It consisted of a combination of closed-ended and Likert-scale questions. Closed-ended questions provided respondents with a fixed set of responses, ensuring ease of analysis and minimizing ambiguity. Likert-scale items, on the other hand, allowed respondents to express degrees of agreement or disagreement with various statements, facilitating a more nuanced capture of attitudes, perceptions, and behaviors related to risk management preparedness.

The questionnaire was divided into several sections, each addressing key areas relevant to the study. These sections included: (i) demographic and enterprise profile information (such as sector, business size, and years of operation), (ii) risk identification and assessment practices, (iii) risk management strategies employed, and (iv) overall risk preparedness. The instrument was structured to ensure that both broad patterns and detailed enterprise-specific insights could be systematically captured.

The selection of a survey questionnaire as the principal instrument was further justified by its capacity to enable standardized data collection across a relatively large sample size. Standardization is crucial for quantitative analysis, as it facilitates statistical interpretation and meaningful comparison of findings (De Leeuw et al., 2005). In addition, the survey format is suitable for busy business owners and managers, as it allows flexibility in completion time while accommodating both online and offline modes of response.

3.7. Data Collection Procedure and Timeline

The data collection process commenced after receiving ethical clearance from the University of Zambia Humanities and Social Sciences Research Ethics Committee on 4th December 2023 (clearance letter attached as annex). Ethical approval ensured that the study adhered to the necessary standards for responsible and respectful research involving human subjects.

Data collection was conducted between December 2023 and October 2024. During this period, a multi-modal approach was adopted to administer the survey questionnaires, aiming to maximize participation and accommodate the diverse operational circumstances of MSMEs in Lusaka's Central Business District (LCBD). Specifically, three methods were utilized: in-person administration at business premises, online distribution via email and survey platforms, and physical drop-and-collect methods where hard copies of the questionnaire were left with respondents and collected later.

The in-person method involved direct visits to MSME business locations within LCBD. This approach provided opportunities for researchers to clarify any questions and ensure completeness of responses. Online surveys were particularly useful for MSMEs with strong digital access, while the drop-and-collect strategy was employed mainly for enterprises that preferred paper-based interactions due to technological constraints or preference for tangible formats.

The timeline was structured to allow flexibility for MSMEs to respond without disrupting their business operations. Initial pilot testing of the questionnaire was conducted in December 2023 to fine-tune the instrument and administration procedures. The full rollout of the survey began in January 2024. Data collection continued through various phases which include field visits, follow-ups, and additional distributions up to October 2024 to achieve the target sample size and ensure representative coverage across sectors and business sizes.

Overall, the data collection procedure was systematic, ethically grounded, and tailored to suit the varied contexts of MSMEs in LCBD, thus enhancing the quality and reliability of the gathered data.

3.8. Data Analysis Instruments and Procedures

The data analysis in this study involved a systematic and rigorous process to extract meaningful insights from the collected data. The raw data collected from various sources underwent thorough cleaning and preprocessing to ensure accuracy and consistency. This step, similar to the approach used by Woldie et al. (2018), involved handling missing values, checking for outliers, and standardizing formats. Descriptive statistics, particularly frequency, were employed to summarize the types of risk management strategies employed by MSMEs. For instance, Oyelaran-Oyeyinka (2018) utilized descriptive statistics to identify diversification strategies, a method that aligns with this study's approach to determining the most common risk management strategies among MSMEs.

Multiple regression analysis was used to evaluate the effect of the risk management strategies on MSMEs' risk management preparedness. The regression equation took the form:

$$RMP = \beta_0 + \beta_1 RA + \beta_2 RR + \beta_3 RS + \beta_4 RT + \in$$

Where:

RMP is the dependent variable risk management preparedness. This variable took the value of 1 if risk preparedness is above 60 percent (prepared), and 0 if it is below 60 percent (not prepared). The researcher developed a quantifiable measure of risk preparedness. Key components or indicators were identified that represent risk preparedness. These included existence of a risk management plan, availability of insurance coverage, financial reserves for emergencies, employee training on risk awareness, regular risk assessments, and diversification of products/services.

Following Wanjau et al. (2018), respondents were asked to rate their level of preparedness for each component using a Likert scale (1 to 5), where higher scores indicate greater preparedness. For instance:

- 1 = Not prepared
- 2 = Slightly prepared

- 3 = Moderately prepared
- 4 = Prepared
- 5 = Very well prepared

Each response was assigned a numerical value based on the rating scale. The scores for each component of risk preparedness were summed to create a total preparedness score for each MSME. For example:

- If an MSME answers:
    - Existence of a risk management plan: 4 (Prepared)
    - Availability of insurance coverage: 3 (Moderately prepared)
    - Financial reserves for emergencies: 5 (Very well prepared)
    - Employee training on risk awareness: 2 (Slightly Prepared)
    - Regular risk assessments: 3 (Moderately prepared)
    - Diversification of products/services: 4 (Prepared)
- Total Score = 4 + 3 + 5 + 2 + 3 + 4 = 21

To compare across MSMEs, total scores were standardized (e.g., converting the total score to a percentage). The maximum possible score was 30 (the six components rated from 1 to 5), the total score of 21 would be converted as follows:

- Percentage Score = (21/30) * 100 = 70 percent

The researcher then set a cutoff score to distinguish between prepared and not prepared MSMEs. In line with Wanjau et al. (2018), a cutoff of 60 percent was chosen. This meant that MSMEs with a score of 60 percent or above were categorized as risk management prepared; while MSMEs with a score below 60 percent were categorized as not risk management prepared.

RA is the independent variable risk avoidance, taking the value 0 if MSME does not employ risk avoidance strategies, and 1 if MSME employs risk avoidance strategies.

RR is the independent variable risk retention, taking the value 0 if MSME does not practice risk retention, and 1 if MSME practices risk retention.

RS is the independent variable risk spreading, taking the value 0 if MSME does not engage in risk spreading, and 1 if MSME engages in risk spreading.

RT is the independent variable risk transferring, taking the value 0 if MSME does not use risk transferring, and 1 if MSME uses risk transferring.

β_0 is the intercept or constant term.

β_1, β_2, β_3 and β_4 are the coefficients of risk avoidance, risk retention, risk spreading, and risk transferring respectively.

$\in$ is the error term

Coefficients, t statistics, and p-values were examined to assess the strength and significance of the effects of the strategies. The coefficients and associated statistics obtained from the regression analysis were interpreted to draw conclusions about the relationships between risk preparedness and the risk managements strategies. The focus was on identifying statistically significant impacts and understanding the direction and magnitude of these effects. R-squared was calculated to gauge the goodness of fit of the regression model. The value provided insights into the proportion of variability in the dependent variable (risk management preparedness) that could be explained by the independent variables.

Throughout the analysis, statistical significance testing was employed to evaluate the reliability of the observed relationships. This involved examining p-values to determine whether the results were likely due to random chance or if they reflected meaningful associations.

To ensure the validity and reliability of the regression model, a series of diagnostic tests were performed. These tests assess the assumptions underlying regression analysis, which include multicollinearity, normality of residuals, heteroscedasticity, and autocorrelation. Violations of these assumptions can lead to biased or inefficient estimates, and therefore, it is crucial to address them before interpreting the results.

Multicollinearity occurs when two or more independent variables in a regression model are highly correlated, which can lead to unstable coefficient estimates and inflate standard errors (Kumari, 2008). This can make it difficult to determine the individual effect of each predictor

variable on the dependent variable. To detect multicollinearity, the Variance Inflation Factor (VIF) was computed for each independent variable. VIF values greater than 10 indicate significant multicollinearity and suggest the need for remedial actions, such as removing one of the correlated variables or applying data transformations (Lavery et al., 2019). A VIF between 5 and 10 indicates moderate multicollinearity and may be acceptable in some cases, depending on the context of the analysis. A VIF less than 5 is generally considered acceptable, suggesting that the predictors are not highly correlated with one another.

The assumption of normality of residuals is critical in regression analysis because deviations from normality can affect the reliability of statistical tests, such as hypothesis testing for coefficients. To assess whether the residuals follow a normal distribution, the Shapiro-Wilk test was used. The null hypothesis of this test posits that the residuals are normally distributed. A p-value less than 0.05 would lead to the rejection of the null hypothesis, indicating that the residuals do not follow a normal distribution (González-Estrada & Cosmes, 2019). In contrast, if the p-value is greater than 0.05, the null hypothesis is not rejected, suggesting that the residuals are normally distributed. This assumption is particularly important for the validity of confidence intervals and significance tests.

Heteroscedasticity refers to the situation where the variance of the residuals is not constant across all levels of the independent variables. The presence of heteroscedasticity violates the assumption of homoscedasticity, which assumes that the variance of the residuals is uniform across all observations. To detect heteroscedasticity, the Breusch-Pagan test was performed. The null hypothesis of this test is that the variance of the errors is constant across observations. A p-value less than 0.05 indicates the presence of heteroscedasticity, which suggests that the model's error variance is not constant and may require remedial measures, such as transforming variables or using robust standard errors (DJalić & Terzić, 2021). A p-value greater than 0.05 indicates that the assumption of homoscedasticity holds, and the residuals do not show significant variance differences.

Autocorrelation refers to the correlation of residuals across time or observations, which violates the assumption of independence of errors. The Durbin-Watson test was employed to check for autocorrelation in the residuals. The test statistic ranges from 0 to 4, where a value close to 2 indicates that there is no significant autocorrelation present. A Durbin-Watson statistic less than 2 suggests positive autocorrelation, meaning that residuals are positively correlated over time, which could indicate model misspecification. Conversely, a value greater than 2 indicates

negative autocorrelation, suggesting that consecutive residuals are negatively correlated (Wang & Akabay, 1994). In either case, the presence of significant autocorrelation would require adjustments to the model to ensure valid inference.

Further, in order to support the robustness of the regression analysis, factor analysis was incorporated as an additional statistical technique. The main objective of employing factor analysis was to validate the structure of the independent variables; risk avoidance, risk retention, risk spreading, and risk transferring and to confirm that each represented a distinct construct. Given that risk management strategies are often conceptually related, it was necessary to statistically verify that the measures for each strategy were indeed capturing separate dimensions, rather than overlapping substantially. This step was crucial to strengthen the validity of the regression findings and to ensure that the model inputs were both theoretically and empirically sound.

Factor analysis is a data reduction and structure detection technique that helps in identifying underlying relationships among measured variables. In this study, it served the dual purpose of simplifying the dataset and establishing construct validity. Specifically, it enabled the grouping of related observed variables under common factors, thus providing a statistical basis for treating risk avoidance, risk retention, risk spreading, and risk transferring as independent constructs influencing MSMEs' risk preparedness.

The study sampled 385 MSMEs from Lusaka's Central Business District (LCBD), a sample size that satisfies widely accepted guidelines for conducting factor analysis. Tabachnick and Fidell (2007) recommend a minimum of 300 cases for reliable factor analysis, and Comrey and Lee (1992) classify a sample of 300–500 as "good to very good." To further assess the appropriateness of the data for factor analysis, preliminary tests were conducted. The Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy was employed to determine whether the variables shared enough common variance to justify factor analysis. A KMO value greater than 0.6 was considered acceptable. Additionally, Bartlett's Test of Sphericity was used to examine whether the correlation matrix was significantly different from an identity matrix. A significant Bartlett's test ($p < 0.05$) would suggest that correlations among items were sufficiently large for factor analysis to proceed.

Principal Component Analysis (PCA) was selected as the method for factor extraction. PCA is suitable when the goal is to summarize the maximum amount of variance in the observed variables with a minimum number of components, which fits the study's purpose of validating

distinct risk management strategies while minimizing measurement redundancy. Factors were retained based on several well-established criteria: eigenvalues greater than 1.0 (Kaiser's Criterion), and ensuring that the cumulative variance explained by the retained factors exceeded 60 percent. These criteria collectively guided decisions regarding the number of meaningful factors to retain for further analysis.

After factor extraction, Varimax rotation was applied to improve interpretability. Varimax, an orthogonal rotation method, maximizes the variance of squared loadings across factors, helping to achieve a simpler and more interpretable factor structure where each variable loads highly onto one factor and minimally onto others. This method was appropriate given the expectation that the four risk management strategies were distinct and theoretically unrelated in terms of operational behavior. For interpretation, factor loadings of 0.4 and above were regarded as practically significant, following conventional standards in social science research. Variables meeting this threshold were considered to meaningfully contribute to the respective factors.

The data analysis was conducted using STATA, a powerful statistical software package widely used for data management, statistical analysis, and graphical representation. STATA was selected for its ability to efficiently handle large datasets, perform a wide range of statistical procedures, and generate clear, interpretable outputs. The software facilitated data cleaning, descriptive analysis, and inferential statistical tests, ensuring accurate and reliable interpretation of the collected information.

3.9. Chapter Summary

This chapter detailed the methodological framework adopted to guide the study. It outlined the research design, provided a description of the study area, and identified the study population and sampling techniques used to select participants. Furthermore, the chapter discussed the data collection instruments and procedures, highlighting the structured approach taken to gather accurate and reliable data. The timeline for data collection was also presented, alongside an explanation of the data analysis instruments and procedures employed. Overall, the methodology was carefully designed to ensure that the study effectively addressed the research objectives and provided a strong basis for the interpretation of findings in subsequent chapters.

CHAPTER 4

FINDINGS AND DISCUSSION

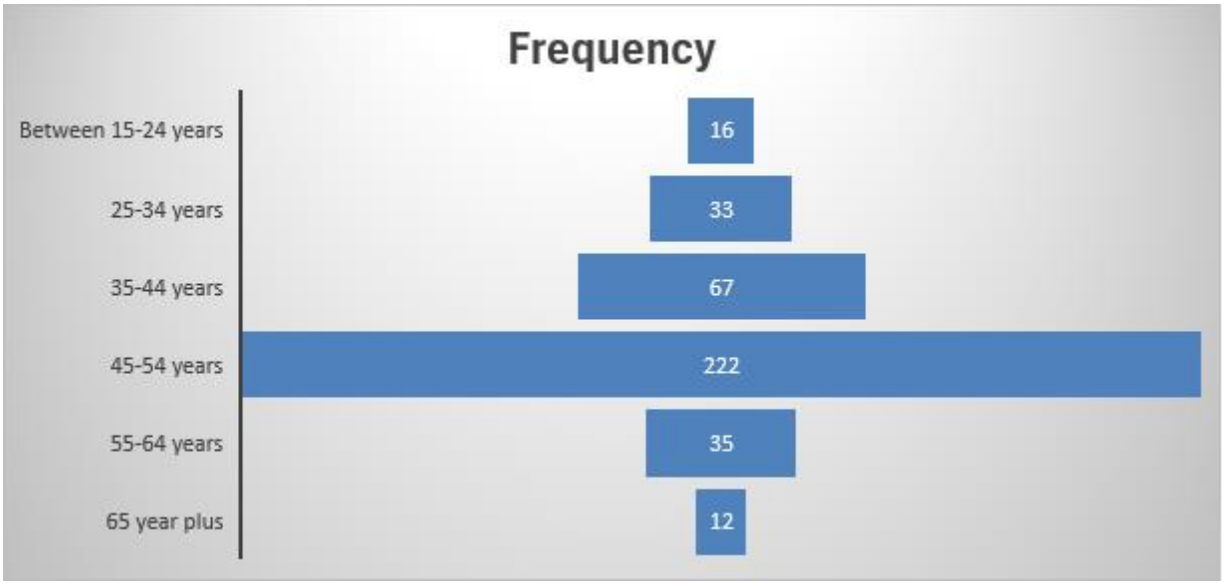
4.0. Introduction

This chapter presents the findings of the study and discusses their implications in relation to the research objectives. It begins by outlining the socio-demographic characteristics of the MSME respondents, providing context on the profiles of the business owners and enterprises involved in the study. Thereafter, the chapter explores the risk preparedness levels of MSMEs in LCBD, followed by an examination of the various risk management strategies employed by these businesses. The chapter also presents the results of diagnostic tests conducted to validate the suitability of the data for regression analysis, ensuring the robustness of the findings. Factor analysis is then introduced to identify and confirm the underlying dimensions of the risk management strategies. Finally, the chapter presents the results of the multiple regression analysis, which assesses the effects of the identified risk management strategies on MSMEs' risk preparedness. The discussion integrates these findings with the theoretical and conceptual frameworks, highlighting both their theoretical significance and practical implications for MSMEs operating within the Lusaka CBD context.

4.1. Socio-Demographic Characteristics

4.1.1. Age of Respondents

Figure 4.1: Age of Respondents



Source: Author's own illustration

Figure 4.1 indicates the age distribution of respondents from the sample population. The age of the respondents ranged from 15 years to 65 years plus. The age frequency distribution of respondents revealed that most of the MSMEs participants (57.66 percent) were in the age group of 45-54 years followed by those in the 35-44years age group (17.40 percent). This demographic variable (middle aged group) is very important as it gives us insights about the population condition and highlight important social and economic behaviours among the MSMEs

4.1.2. Education Level of Respondents

The results in Table 4.1 reveal that about 161 respondents out of the sample of 385 respondents (41.82 percent) attended Tertiary Education. These are followed by those who attended primary education, 113 out of the 385 respondents representing 29.35 percent and while those who attended secondary education (98) represented 25.45 percent and the least was those who had no formal education at all (13) representing 3.38 percent. This demographic variable is important as it gives us insights into levels of literacy among our MSMEs.

Table 4.1: Education Level of Respondents

Education Attainment	**Frequency**	**Percent**
No education	**13**	**3.38**
Primary	**113**	**29.35**
Secondary	**98**	**25.45**
Tertiary	**161**	**41.82**
Total	**385**	**100**

Source: Author's own compilation

4.1.3. Number of Employees

Table 4.2 below offers an in-depth perspective on the workforce composition of MSMEs under examination in this study. The dataset categorizes these enterprises based on the number of employees, revealing key insights into the scale of employment within the local business landscape.

Table 4.2: Number of Employees Per MSME

Number of Employees	Frequency
Between 1-5	237
Between 5-10	123
Over 10	25

Source: Author's own compilation

The most predominant category, "Between 1-5 employees," commands a significant presence with a frequency of 237, constituting approximately 61.6 percent of the total MSMEs surveyed. This dominance suggests that a substantial majority of the businesses operate with a relatively small workforce, indicative of micro-enterprises and small businesses where resources and responsibilities are likely distributed among a compact team.

In the subsequent category, "Between 5-10 employees," the frequency of 123 corresponds to around 32 percent of the total MSMEs. This indicates a considerable number of enterprises with a slightly larger workforce, reflecting a mix of small to medium-sized businesses that have expanded beyond the micro-enterprise scale. The category "Over 10 employees" represents businesses with a more substantial staffing level, accounting for 25 MSMEs or approximately 6.5 percent of the total. While a smaller proportion, it signifies enterprises with a larger employee base, suggesting a more established and growing business environment with the capacity for increased economic impact. Thus, table 5, with its distribution and accompanying percentages, provides a comprehensive view of the employment dynamics within the surveyed MSMEs.

4.1.4. Type of Business

Table 4.3 provides the types of businesses included in the study as captured through the survey questionnaires. The table shows that the study comprehensively encompassed a diverse array of business types within LCBD, reflecting the multifaceted nature of the local economy. The businesses under scrutiny included: auto parts shops; groceries shops; clothing shops; hardware shops; used clothing shops; eating places; electrical appliances shops; pharmacies; stationery shops; barbershops; agro shops; liquor stores; saloons; bars; butcheries; vegetable stands, phone accessories shops; furniture shops; and electrical appliances repair shops

Table 4.3: Types of MSMEs

Nature of Business	Frequency
Auto parts	27
Groceries	22
Clothing Shop	21
Hardware	23
Used Clothing	29
Food Eating Place	19
Electrical Appliances	23
Pharmacy	26
Stationery Shop	23
Barbershop	15
Agro Shop	21
Liquor Store	26
Saloon	20
Bar	15
Butchery	17
Vegetable Stand	13
Phone Accessories	13
Furniture Shop	23
Electrical Appliances Repair	9
Total	385

Author's own compilation

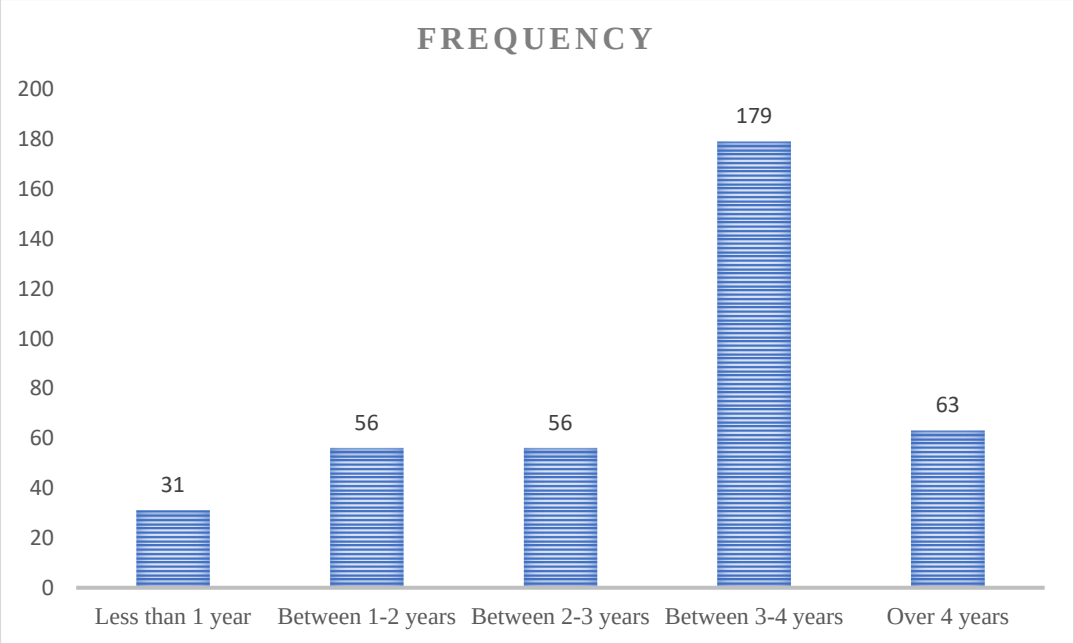
Used clothing businesses took the lead as the most frequently interviewed, with 29 establishments participating in the study. Auto parts shops closely followed with 27 shops included. Pharmacies and liquor stores both demonstrated significant representation, each with 26 occurrences. Hardware stores, electrical appliances shops, stationery shops, and furniture shops shared a frequency of 23. Groceries shops has 22 occurrences. Clothing shops and agro shops each had 21 occurrences. Saloons, food eating places, and butcheries were next in frequency, with 20, 19, and 17 occurrences respectively. Barbershops and bars shared a frequency of 15. Phone accessories businesses and vegetable stands each had 13 occurrences. Electrical appliances repair services, with 9 occurrences, represented the least occurrence.

By incorporating a diverse array of business types into its purview, the study lays the groundwork for a comprehensive examination of the risk management preparedness of MSMEs in LCBD. The inclusive nature of the research allows for a holistic understanding of the risk management preparedness of the MSMEs and is pivotal in deriving meaningful insights that can drive actionable outcomes.

4.1.5. Duration of Business

Figure 4.2 provides information on the length of existence of MSMEs. It serves as a comprehensive snapshot of the temporal evolution of the MSMEs

Figure 4.2: Number of Years in Business



Source: Author's own illustration

This data intricately categorizes the businesses based on the duration or length of time they have been actively operating, unraveling valuable insights into the nuanced developmental stages within the local business landscape. Within the "Less than 1 year" category, comprising 31 MSMEs, there emerges a distinctive group of enterprises in their early stages, indicative of startups or those recently venturing into the business sphere. Moving forward, the "Between 1-2 years" category accommodates 56 enterprises that have successfully surpassed their inaugural year, reflecting a pivotal milestone in their journey. A parallel representation is found in the "Between 2-3 years" category, where an additional 56 MSMEs signal a trajectory of further stabilization and adaptation to the business environment.

The most notable concentration is discerned in the "Between 3-4 years" category, housing 179 MSMEs. This segment signifies businesses that have not only overcome the initial hurdles of establishment but have also begun to consolidate their presence in the market. It marks a critical phase where enterprises are solidifying their operations and potentially contributing to the local economy in more impactful ways. Concluding the temporal spectrum is the "Over 4 years" category, encompassing 63 MSMEs. This section denotes a more mature and established group of enterprises that have not only weathered the challenges associated with startup phases but have demonstrated resilience and success in navigating the complexities of the business environment over an extended period.

4.1.6. Ownership of the Business

Figure 4.3 below provides the diverse ownership structures prevalent among the MSMEs scrutinized in this study. This dataset plays a pivotal role in untangling the intricate web of business ownership, offering a comprehension of the varied ownership models that define the local business landscape.

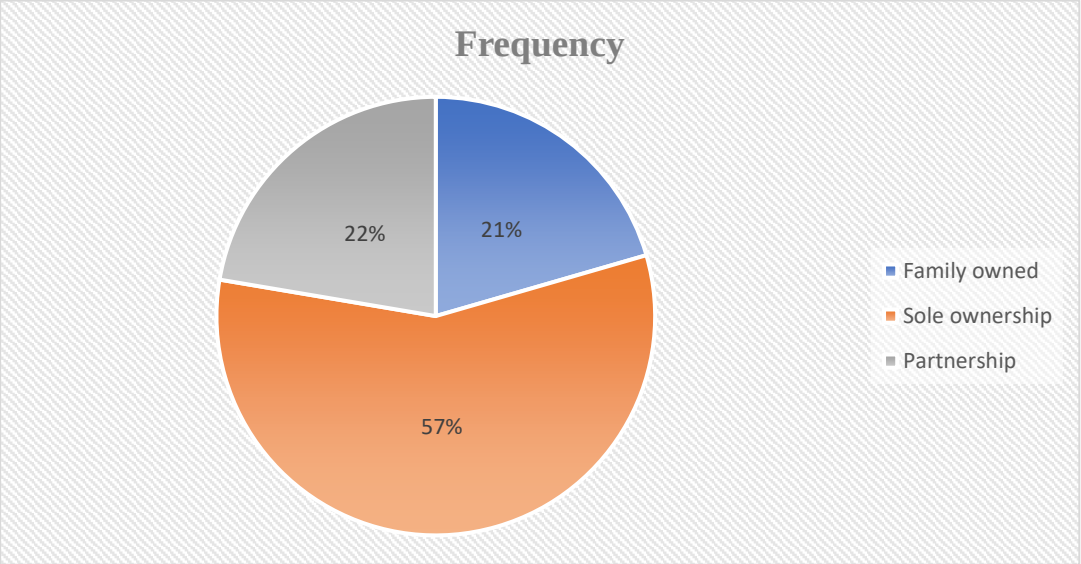
Examining the specifics, family ownership constitutes approximately 21 percent of the total MSMEs included in the study. This substantial proportion implies that a significant portion of enterprises in the study operate under the influence of familial values, with management and decision-making processes deeply rooted in family dynamics.

Sole ownership represents approximately 57 percent of the total MSMEs surveyed, underscoring the dominant role of individual proprietors in the local business environment. This is indicative of a prevailing trend where individual entrepreneurs or proprietors autonomously own and manage their businesses. This high occurrence signifies a landscape

abundant in independent ventures, each steering its course under individual ownership structures.

Partnership, with a 22 percent, highlights the proportion of MSMEs engaging in collaborative frameworks. This ownership model suggests that two or more individuals have forged partnerships to jointly shoulder responsibilities, risks, and rewards, fostering a cooperative approach to entrepreneurship. The prevalence of family-owned enterprises, sole proprietorships, and partnerships collectively unveils a multifaceted business ecosystem characterized by diverse ownership models.

Figure 4.3: Ownership of MSMEs



Source: Author's own illustration

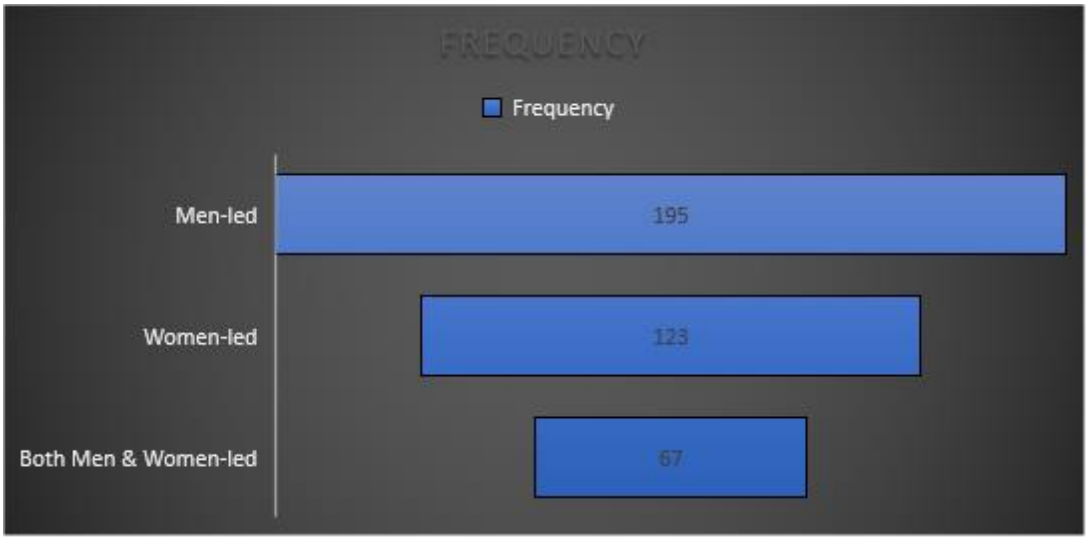
4.1.7. Leadership of the Business

Figure 4.4 serves as a crucial repository of information, shedding light on the nature of leadership within the MSMEs. This data is instrumental in elucidating the diverse leadership structures prevalent in the local business landscape, contributing to further understanding of the leadership dynamics in play. Men-led businesses emerge prominently with a frequency of 195, signifying a substantial representation of enterprises led by male leaders. This prevalence suggests that a significant proportion of the MSMEs in the study are under the guidance and direction of male leadership. The 195 men-led businesses constitute approximately 50.6 percent of the total MSMEs surveyed, underscoring the predominant role of men in leadership positions within the local entrepreneurial landscape.

Women-led businesses command attention with a frequency of 123, indicative of a notable presence of enterprises led by female leaders. This occurrence signifies a landscape where women play pivotal roles in steering and managing MSMEs. The 123 women-led businesses represent around 31.9 percent of the total MSMEs, underscoring the significant contribution of women leaders in the local business environment.

Both Men & Women-led enterprises, with a frequency of 67, highlight a substantial number of MSMEs operating under shared leadership structures. This dynamic suggests a collaborative approach to business leadership, where both men and women contribute to guiding the enterprises forward. The 67 businesses with joint leadership represent approximately 17.4 percent of the total MSMEs, emphasizing the diversity and inclusivity inherent in the leadership structures of the local business tapestry. The distribution of leadership types, including men-led, women-led, and both men and women-led, reveals a multifaceted business ecosystem characterized by diverse leadership models.

Figure 5.4: MSME Leadership



Source: Author's own illustration

4.2. Risk Management Preparedness

Table 4.4 shows the status of MSMEs according to their risk preparedness. The findings provide an insightful overview of the risk management preparedness status of MSMEs in the LCBD. The data indicates that only 94 MSMEs are categorized as risk prepared, while a significant majority of 291 MSMEs are risk unprepared. This distribution points to a notable gap in the risk management capabilities within the MSMEs.

Table 4.4: MSMEs' Risk Preparedness Status

Status	Number of MSMEs
Risk Prepared	94
Risk Unprepared	291

Source: Author's own compilation

The relatively small proportion of risk prepared MSMEs, approximately 24 percent of the total sample, suggests that a large segment of MSMEs in LCBD remain vulnerable to potential risks and disruptions. This limited preparedness could make these businesses more susceptible to financial, operational, and strategic challenges when confronted with unforeseen events, such as economic fluctuations or supply chain interruptions. This vulnerability is supported by research from Dube et al. (2021), which emphasizes that MSMEs lacking systematic risk management practices are often more exposed to operational risks.

Several factors may contribute to the high percentage of risk unprepared MSMEs, which constitutes 76 percent of the sample. Financial constraints are a primary concern, as limited resources often prevent MSMEs from investing in comprehensive risk management tools and strategies. This aligns with findings by Wang et al. (2021), who noted that perceived high costs of insurance and other mitigation measures can deter MSMEs from adopting robust risk management practices. Additionally, a lack of knowledge and training in risk management plays a significant role. Many MSMEs may not have access to sufficient training or awareness programs, making it challenging for them to implement effective strategies.

The implications of widespread unpreparedness are serious. MSMEs that are unprepared for risks are more susceptible to disruptions that can endanger their operations and financial viability. This vulnerability could lead to increased instances of business closures or significant operational setbacks when faced with crises. Research by Mazzarol and Reboud (2020) highlights the critical nature of resilience during economic downturns and suggests that businesses equipped with diversified risk strategies fare better.

4.3. Results of Diagnostic Tests

Table 4.5 shows provides the results of diagnostic tests conducted. The table reveals several key aspects regarding the diagnostic tests conducted for the regression model. Firstly, the Variance Inflation Factor (VIF) is below the threshold of 5, signaling the absence of multicollinearity concerns. This implies that the independent variables provide unique

information and are not excessively correlated, contributing to the stability and reliability of the regression analyses.

Table 4.5: Diagnostic Tests Results

VIF	Shapiro-Wilk Test	Breusch-Pagan Test	Durbin-Watson Test
4.3	0.06	0.09	2.03

Source: Author's own compilation

The p-value associated with the Shapiro-Wilk Test, assessing the normality of residuals, is above the commonly adopted significance level of 0.05. This suggests that the residuals in each model adhere to a normal distribution, a crucial assumption for robust regression analysis.

The p-value derived from the Breusch-Pagan Test, which explores the presence of heteroscedasticity, is above the 0.05 threshold. This collective result indicates that the variance of the residuals remains constant across different levels of the independent variables, enhancing the validity of the regression models.

Lastly, the Durbin-Watson Test values approximate 2. This proximity to 2 implies the absence of significant autocorrelation in the residuals. The adherence to this benchmark suggests that the residuals do not exhibit a systematic pattern of dependence, reinforcing the reliability of the regression analyses.

Overall, the diagnostic tests collectively affirm the robustness of the regression models, with no indications of multicollinearity, normality violations, heteroscedasticity, or significant autocorrelation. This fortifies the credibility of the study's findings and lends confidence to the reliability of the regression analysis.

4.4. Factor Analysis Findings

In Table 4.6, the KMO value obtained was 0.842, which is considered meritorious, according to Kaiser (1974), indicating that the sampling was adequate for factor analysis. Additionally, Bartlett's Test of Sphericity was highly significant (Chi-Square = 2750.362, df = 210, $p < 0.001$), confirming that the correlation matrix was not an identity matrix and that relationships existed among variables, thus justifying the use of factor analysis.

Table 4.6: KMO and Bartlett's Test Results

Test	Value
Kaiser-Meyer-Olkin (KMO) Measure	0.842
Bartlett's Test of Sphericity	Chi-Square = 2750.362, df = 210, p < 0.001

Source: Author's own compilation

Following confirmation of the data's suitability, Principal Component Analysis (PCA) with Varimax rotation was performed. The results in Table 4.7 indicate the extraction of four factors, each having eigenvalues greater than 1.0. These four factors collectively accounted for 73.4 percent of the total variance, exceeding the recommended 60 percent threshold for satisfactory explanatory power (Hair et al., 2010).

Table 4.7: Principal Component Analysis Results

Component	Initial Eigenvalues	% of Variance	Cumulative %
1	5.122	28.45 percent	28.45 percent
2	3.671	20.39 percent	48.84 percent
3	2.315	12.86 percent	61.70 percent
4	2.100	11.73 percent	73.43 percent

Source: Author's own compilation

Table 4.8 shows the rotated component matrix, revealing clear and strong loadings, confirming that the items measuring each risk management strategy were indeed grouped together under distinct factors. All factor loadings were above 0.5, which is well within acceptable limits, suggesting practical and statistical significance.

As shown in Table 4.8, all items loaded strongly on their respective factors without significant cross-loadings, indicating good discriminant validity among the four constructs. For instance, all items designed to measure risk avoidance loaded highly on the first factor (above 0.75), with negligible loadings on other factors. The same pattern was observed for risk retention, risk spreading, and risk transferring, further confirming the distinctiveness of each construct.

The findings of the factor analysis provide strong empirical support for the validity of the constructs used in the regression model. It affirms that the four independent variables risk avoidance, risk retention, risk spreading, and risk transferring are statistically distinguishable and conceptually coherent. This strengthens the credibility of the regression results by reducing concerns about multicollinearity and construct overlap.

Table 4.8: Rotated Component Matrix

Item	Risk Avoidance	Risk Retention	Risk Spreading	Risk Transferring
Avoidance Strategy 1	0.813			
Avoidance Strategy 2	0.785			
Avoidance Strategy 3	0.756			
Retention Strategy 1		0.801		
Retention Strategy 2		0.774		
Retention Strategy 3		0.761		
Spreading Strategy 1			0.823	
Spreading Strategy 2			0.799	
Spreading Strategy 3			0.776	
Transferring Strategy 1				0.834
Transferring Strategy 2				0.806
Transferring Strategy 3				0.792

Source: Author's own compilation

Overall, the factor analysis confirms that the independent variables included in the study are appropriately structured and capable of capturing distinct dimensions of risk management preparedness among MSMEs in LCBD.

4.5. Discussion

4.5.1. Risk Management Strategies Implemented by MSMEs (Objective 1)

Table 4.9 below shows the risk management strategies prevalent among MSMEs in LCBD.

Table 4.9: MSMEs' Risk Management Strategies

Strategy	Frequency (Number of MSMEs)
Risk Avoidance	204
Risk Retention	29
Risk Spreading	125
Risk Transferring	27

Source: Author's own compilation

Table 4.9 reveals that MSMEs in the LCBD employ four main risk management strategies: Risk avoidance; Risk retention; Risk spreading, and Risk Transferring. Risk avoidance is the frequently employed strategy with more than half of the MSMEs using this strategy. This predominance of risk avoidance reflects a cautious approach, where businesses actively steer clear of high-risk activities or ventures. Such findings align with studies like Woldie et al. (2018), who noted similar behavior in Ethiopian MSMEs, where firms prioritized stability over high returns due to limited resources and a challenging business environment. However, while risk avoidance can protect businesses from severe losses, it may also restrict innovation and growth opportunities, as highlighted by Pérez-López et al. (2020), who found that excessive reliance on risk avoidance hindered long-term competitiveness and market expansion.

Risk spreading comes in second place as the frequently used strategy. The use of risk spreading indicates that many MSMEs understand the importance of diversification as a buffer against market fluctuations and operational disruptions. Mazzarol and Reboud (2020) support this finding, noting that SMEs employing risk spreading demonstrated greater resilience during economic downturns due to their ability to offset losses in one area with gains in another. This aligns with the notion that diversification enhances stability and supports business continuity. However, Oyelaran-Oyeyinka (2018) found that while risk spreading is beneficial, its success depends on the market conditions and the MSME's capacity to manage diverse operations effectively.

Risk retention comes in third place, with the businesses adopting this strategy accepting manageable risks internally. Dube et al. (2021) observed that during the COVID-19 pandemic,

MSMEs that relied solely on risk retention without comprehensive contingency plans faced significant operational challenges. This supports the finding that risk retention, while practical for smaller risks, poses substantial threats during major disruptions. The limited use of risk retention in LCBD could indicate that most MSMEs lack the financial strength or risk tolerance needed to handle potential losses internally, consistent with findings by Panigrahi et al. (2012), who highlighted that MSMEs often struggle with limited resources that restrict their risk management capabilities.

Finally, risk transferring is the least utilized strategy. The low adoption rate of risk transferring strategies points to financial and informational barriers. Wang et al. (2021) found that while insurance can significantly enhance an MSME's risk preparedness and reduce financial losses during unforeseen events, uptake remains low due to perceived high costs and limited awareness. This finding resonates with the current study, suggesting that many MSMEs in LCBD may view insurance as an unnecessary or unaffordable expense. Moreover, Barlow and Kivleniece (2016) noted that although insurance uptake could bolster business resilience, many MSMEs in developing countries fail to leverage this tool due to inadequate financial literacy and lack of tailored insurance products.

These findings suggest that while MSMEs in LCBD are taking steps to manage risks through strategies like risk avoidance and risk spreading, there is room for improvement in adopting more comprehensive practices. The low utilization of risk retention and risk transferring indicates potential gaps in financial resources and education. Studies like Nuwagaba (2015) emphasize the importance of policy and support programs that improve MSMEs' access to risk management tools, such as insurance and training programs on risk mitigation.

Further, these findings offer meaningful insights when viewed through the lens of the Risk Management Theory (RMT), which emphasizes the structured identification, assessment, and mitigation of risks. The predominance of risk avoidance among MSMEs in the LCBD suggests that businesses are actively engaged in recognizing and steering clear of potential threats, reflecting the core RMT principle of proactive risk identification and management. This behavior indicates that many MSMEs do not merely react to risks as they arise but instead adopt preventive strategies, aligning with RMT’s call for systematic and anticipatory risk management approaches.

The frequent use of risk spreading also supports RMT’s assertion that diversification and distribution of risks across different activities enhance organizational resilience. MSMEs

employing risk spreading demonstrate an understanding of risk mitigation by not concentrating vulnerabilities in a single business line, thus adhering to the theory's structured mitigation principle.

However, the moderate reliance on risk retention and the low adoption of risk transferring indicate that while MSMEs are implementing risk management strategies, the application may be incomplete or constrained by limited resources, knowledge, or access to formal risk management instruments. RMT acknowledges that effective risk management systems require not only identification and assessment but also the implementation of appropriate mitigation strategies based on organizational capacity, a factor that seems to challenge many MSMEs in this context.

Overall, the findings suggest that while the principles of RMT are partially reflected in the practices of MSMEs in Lusaka's CBD, resource constraints, limited expertise, and cost perceptions likely inhibit the full realization of structured risk management systems.

4.5.2. Effects of Risk Management Strategies on Risk Preparedness (Objective 2)

Table 4.10 is a summary of the regression results.

Table 4.10: Regression Results

Risk Preparedness	**Coef.**	**Std. Err.**	**t**	**P > |t|**	**[95 % Conf. Interval]**	
Risk Avoidance	0.152	0.038	4.00	0.000	0.077	0.227
Risk Retention	-0.091	0.042	-2.17	0.031	-0.174	-0.008
Risk Spreading	0.128	0.045	2.84	0.005	0.040	0.216
Risk Transferring	0.206	0.036	5.72	0.000	0.135	0.277
Constant	0.482	0.101	4.77	0.000	0.284	0.680
Source	**SS**	**df**	**MS**	Number of Obs. = 385		
Model	12.610	4	3.15525	F(4, 380) = 18.59		
Residual	56.045	380	0.1475	Prob > F = 0.0000		
Total	68.655	384	0.1788	R-squared = 0.744		
				Adj R-squared = 0.735		
				Root MSE = 0.412		

Source: Author's own compilation

The regression results in Table 4.10 provide significant insights into the effect of the risk strategies on the risk preparedness of MSMEs. The coefficient for risk avoidance is 0.152, which means that for every one-unit increase in the use of risk avoidance strategies, MSMEs' preparedness increases by 15.2 percent. This indicates that MSMEs that actively take measures to avoid riskier situations whether by limiting exposure to unstable markets or reducing their reliance on unpredictable income sources are significantly more prepared to handle potential disruptions. A higher coefficient suggests that risk avoidance has a relatively strong positive impact on preparedness, implying that businesses in Lusaka's CBD that are cautious and deliberate about where and how they operate are more likely to withstand challenges.

This relationship between risk avoidance and risk preparedness is statistically significant, as shown by the p-value which is less than the conventional 0.05 ($p = 0.000$). This reinforces the strength of this relationship, indicating that the impact of risk avoidance is not due to random chance but reflects a consistent pattern across the data. Therefore, MSMEs that adopt a risk-averse stance are better positioned to manage potential shocks, as they proactively seek to eliminate high-risk activities that could otherwise jeopardize their operations.

This aligns with findings by Woldie et al. (2018), who highlighted that Ethiopian MSMEs benefitted from avoiding high-risk activities and focusing on stable market segments. This strategic approach allows MSMEs to shield themselves from potential threats and maintain operational stability. While risk avoidance can sometimes limit opportunities for growth, the findings in this context suggest that MSMEs use it effectively to enhance their preparedness.

In the context of LCBD, MSMEs use avoidance strategies to protect themselves from disruptions (such as sudden regulatory inspections) or economic shocks (such as currency devaluations). For instance, some MSMEs avoid stocking perishable goods during anticipated political events or avoid dealing in foreign currency transactions during periods of exchange rate volatility. Therefore, risk avoidance directly contributes to operational stability for MSMEs navigating Lusaka's sometimes volatile business environment.

The coefficient for risk retention is -0.091, suggesting that for each additional unit of reliance on risk retention, MSMEs' preparedness decreases by 9.1 percent. This negative coefficient implies that businesses that choose to absorb risks internally, without seeking external help or mitigation strategies (such as insurance), are less prepared for disruptions. This finding suggests that risk retention, while potentially suitable for smaller or more manageable risks, could undermine preparedness when faced with larger, unpredictable events.

This is reinforced by the statistical significance of the coefficient, with p-value of 0.031. This indicates that rightfully to conclude that relying solely on risk retention actually works against the MSMEs in their efforts to mitigate the impacts of risks, underscoring the importance of not relying entirely on internal measures, especially when faced with significant threats that could overwhelm internal resources.

This outcome aligns with observations by Dube et al. (2021), who noted that SMEs solely relying on internal measures faced significant operational challenges during unforeseen events like the COVID-19 pandemic. The result suggests that while risk retention may be a viable option for minor, manageable risks, it becomes problematic when used as the main strategy, especially during significant disruptions. This negative impact highlights the importance of a balanced approach that incorporates other risk management strategies to mitigate vulnerabilities.

For MSMEs in LCBD, risk retention is often a necessity rather than a choice due to financial constraints (Kalinda & Muma, 2021). Many MSMEs cannot afford insurance policies, formal risk management consultancies, or professional legal services. As a result, they absorb risks internally, hoping that operational profits will buffer them against shocks. However, as shown in the data, this practice leaves them vulnerable, especially to events like theft, fire, or health emergencies. For example, a small restaurant in LCBD that does not insure its equipment may face complete shutdown after a minor kitchen fire.

The coefficient for risk spreading is 0.128, meaning that a one-unit increase in the use of risk spreading strategies results in a 12.8 percent improvement in preparedness. This coefficient indicates that MSMEs that engage in diversification whether by expanding into new markets, offering a broader range of products, or diversifying their customer base are better prepared to handle various types of disruptions. The relationship is statistically significant of this coefficient with a p-value of 0.005, thus highlighting the importance of diversification as a risk management tool.

The findings are in line with Mazzarol and Reboud (2020), who emphasized that diversification allows MSMEs to distribute risk across different income streams and market segments, thereby buffering them against market-specific disruptions. Oyelaran-Oyeyinka (2018) similarly concluded that risk spreading is particularly effective in reducing vulnerability to market fluctuations. The positive association observed in this study reinforces the notion that

diversification strategies contribute to organizational resilience and better preparedness outcomes for MSMEs.

In LCBD, MSMEs often engage in informal diversification. A tailor might supplement income by selling second-hand clothes, while a restaurant might offer catering services to broaden its client base. Given the informal and competitive nature of the CBD market (ZDA, 2022), such strategies buffer MSMEs from seasonal demand fluctuations or supply chain disruptions. Risk spreading thus acts as an adaptive response to the volatile local economy, enhancing the businesses' survival prospects.

The coefficient for risk transferring is 0.206, meaning that every one-unit increase in the use of risk transfer mechanisms leads to a 20.6 percent improvement in risk preparedness. In other words, MSMEs utilizing risk transfer mechanisms are 20.6 percent more prepared for disruptions compared to those that do not. The higher coefficient for risk transferring compared to other strategies indicates that this is the most effective strategy for enhancing risk preparedness among MSMEs. Further the relationship between risk transferring and preparedness is statistically significant ($p = 0.000$), reinforcing this strong positive relationship.

This finding echoes the conclusions of Wang et al. (2021), who found that MSMEs with adequate insurance coverage were better equipped to manage financial losses during crises. In the context of LCBD, MSMEs that invest in basic insurance packages such as fire insurance for small shops or health insurance for key employees demonstrate significantly greater resilience to adverse events. A small electronics shop owner who has insured his inventory, for instance, can recover more quickly from theft than one who has not. This suggests that scaling up risk transfer mechanisms, possibly through micro-insurance products targeted at MSMEs, could significantly boost overall risk preparedness in LCBD.

The model diagnostics collectively reflect a very strong fit to the data, underscoring the reliability and explanatory strength of the regression model developed in this study. The R-squared value of 0.744 indicates that approximately 74.4 percent of the variation in risk preparedness among MSMEs in LCBD can be explained by the four risk management strategies included in the analysis: risk avoidance, risk retention, risk spreading, and risk transferring. In the context of social science research, where models often deal with complex human behavior and external influences, an R-squared value above 0.60 is typically considered strong (Hair et al., 2019). Therefore, an R-squared of 0.744 signifies a particularly high

explanatory power, suggesting that the model captures a substantial portion of the factors influencing risk preparedness.

Further supporting the model's strength is the Adjusted R-squared value of 0.735, which accounts for the number of predictors in the model. The adjusted figure being close to the original R-squared value indicates that the addition of predictors has not led to overfitting; rather, it confirms that the variables selected are both appropriate and meaningful in explaining the dependent variable. The minimal reduction between R-squared and Adjusted R-squared emphasizes that the model maintains its explanatory strength even after adjusting for complexity, enhancing its robustness and generalizability to similar MSME populations.

The F-statistic of 18.59, coupled with a p-value of 0.0000, further validates the overall significance of the model. The F-statistic measures whether at least one of the independent variables is significantly related to the dependent variable, and the very small p-value confirms that the relationship observed is highly unlikely to have occurred by random chance. In practical terms, this result means that the set of risk management strategies, when considered together, significantly predict variations in MSMEs' risk preparedness, justifying the model's structure and the selection of independent variables.

In addition, the model reports a Root Mean Squared Error (RMSE) of 0.412, reflecting the average distance between the observed and predicted values. A lower RMSE value is desirable as it indicates that the model's predictions are closely aligned with the actual outcomes. An RMSE of 0.412, in this case, suggests that while there are some variations, the prediction errors are relatively small and manageable, contributing additional evidence of the model's predictive accuracy.

Taken together, these diagnostic indicators affirm that the regression model is not only statistically valid but also practically relevant. The high R-squared and Adjusted R-squared values, the significant F-statistic, and the low RMSE collectively demonstrate that the four selected risk strategies—risk avoidance, risk retention, risk spreading, and risk transferring are critical determinants of MSME preparedness in LCBD. Consequently, the model provides a credible and empirically grounded framework for understanding how risk management practices influence business resilience in the LCBD.

The findings indicate that all four risk management strategies have distinct impacts on the risk preparedness of MSMEs. Among them, risk transferring stands out as the most effective

approach, significantly enhancing preparedness levels. This suggests that MSMEs that utilize mechanisms like insurance are better equipped to handle potential disruptions, providing them with a critical safety net against unforeseen challenges. Risk avoidance also contributes positively to preparedness, highlighting its role in helping businesses navigate through stable market conditions by steering clear of high-risk activities.

However, risk retention negatively impacts risk preparedness, indicating that businesses that primarily rely on retaining risks may actually find themselves less prepared for unexpected events. This underscores the importance of diversifying risk management strategies rather than relying on a single approach. Risk spreading emerges as another valuable strategy, as it enhances preparedness by allowing MSMEs to distribute risk across various avenues, thus creating a buffer against specific market vulnerabilities.

The conceptual framework underpinning this study proposed that different risk strategies—risk avoidance, retention, spreading, and transferring—would have distinct effects on MSME risk preparedness outcomes. The results above offer strong validation of this framework, confirming that each of the four risk management strategies significantly influences preparedness, albeit in varying directions and magnitudes. Risk avoidance, risk spreading, and risk transferring show positive associations with preparedness, indicating that when MSMEs adopt proactive, diversified, or externalized approaches to managing risks, they enhance their ability to withstand disruptions. In contrast, the negative relationship observed with risk retention suggests that simply absorbing risks internally, without structured mitigation or external support, weakens overall preparedness.

Furthermore, the Resource-Based View (RBV) theory, which is part of the theoretical framework of this study, emphasizes that internal capabilities such as efficient risk management constitute vital resources that provide firms with a sustained competitive advantage. The positive impact of risk avoidance, spreading, and transferring on preparedness reflects the MSMEs' strategic mobilization of internal competencies and external partnerships to strengthen their resilience. Conversely, the negative influence of risk retention aligns with RBV's assertion that inadequate resource development or underinvestment in strategic capabilities can leave firms vulnerable. Overall, the findings illustrate how MSMEs' ability to manage risks effectively is not merely a defensive tactic but a key strategic asset in navigating uncertain business environments.

4.6. Chapter Summary

This chapter provided a comprehensive presentation and discussion of the study's findings. The socio-demographic analysis revealed critical insights into the profiles of MSME owners and businesses, including age, education levels, business types, and operational characteristics. The assessment of risk preparedness indicated varying levels of readiness among MSMEs to confront and manage risks. In examining risk management strategies, the study identified risk avoidance, risk retention, risk spreading, and risk transferring as the principal methods employed by businesses to mitigate potential threats.

Diagnostic tests confirmed that the data met the necessary statistical assumptions for reliable regression analysis. Factor analysis validated the grouping of risk management practices, strengthening the foundation for subsequent analytical procedures. The regression analysis showed that risk avoidance, risk spreading, and risk transferring positively influenced MSMEs' risk preparedness, while risk retention had a negative impact. The model demonstrated a strong fit, with high explanatory power and statistical significance.

Overall, the findings underscore the pivotal role that proactive and diversified risk management strategies play in enhancing the resilience and preparedness of MSMEs in LCBD.

CHAPTER 5

CONCLUSIONS AND RECOMMENDATIONS

5.0. Introduction

This chapter presents the key conclusions drawn from the study based on the research objectives and findings. It critically discusses the implications of the results regarding the types of risk management strategies adopted by MSMEs in LCBD and their impact on risk management preparedness. The chapter also offers actionable recommendations targeted at practitioners, policymakers, and other stakeholders to enhance risk preparedness and resilience among MSMEs. Furthermore, it provides specific suggestions for future research to build on the insights generated by this study and to address identified gaps.

5.1. Conclusion

With regard to objective 1 concerning the investigation of the types of risk management strategies implemented by MSMEs in LCBD, the study concludes as follows: Risk avoidance is the most frequently adopted strategy, utilized by over half of the surveyed businesses. This predominance of risk avoidance reflects a cautious approach, where enterprises actively steer clear of high-risk activities or ventures, prioritizing short-term stability over potential growth opportunities. While this strategy serves to protect these businesses from immediate threats, it may also restrict their potential for innovation and long-term competitiveness.

Risk spreading has emerged as the second most prevalent strategy, indicating a growing awareness among MSMEs of the benefits of diversification in enhancing stability and mitigating vulnerabilities. By spreading risks across various income streams and market segments, these businesses can buffer themselves against market fluctuations and operational challenges.

However, the underutilization of risk retention and risk transferring strategies raises concerns about the overall risk management landscape. The negative coefficient associated with risk retention suggests that businesses relying solely on this strategy may experience decreased preparedness, as internalizing risks without proper planning can lead to significant setbacks.

Furthermore, the low adoption of risk transferring methods, such as insurance, points to the financial and informational barriers that hinder many MSMEs from adequately safeguarding

against unforeseen events. This low uptake of risk transfer mechanisms indicates a potential gap in understanding the long-term benefits that such strategies can offer.

With regards to objective aimed at evaluating the effect of the risk management strategies implemented by MSMEs' on risk management preparedness, the study makes the following conclusion: Among the strategies analyzed, risk transferring emerged as the most influential, exerting the highest positive impact on risk preparedness. This highlights that MSMEs which proactively transfer their risks through mechanisms such as insurance, outsourcing, and contractual agreements are better positioned to mitigate potential disruptions and ensure business continuity.

Following closely, risk avoidance and risk spreading also demonstrated positive and statistically significant effects on preparedness. MSMEs that engage in risk avoidance, by deliberately steering clear of high-risk activities or situations, enhance their ability to maintain operational stability. Similarly, those that practice risk spreading, such as diversifying their suppliers, markets, or products, are better insulated from shocks affecting any single area of their operations. These findings underline the critical value of adopting diversified and preemptive approaches to managing business risks.

Conversely, the analysis revealed that risk retention had a negative relationship with preparedness, suggesting that MSMEs that rely heavily on absorbing risks internally, without sufficient mitigation or external support, are less likely to be adequately prepared for disruptions. This finding highlights the limitations of risk retention as a standalone strategy, particularly for small and resource-constrained businesses.

Overall, the study's results emphasize that MSMEs in LCBD that adopt a proactive and diversified approach to risk management particularly through risk transferring, avoidance, and spreading are significantly better equipped to manage uncertainties. These insights are vital for informing both MSME practitioners and policymakers seeking to strengthen the resilience and sustainability of the small business sector in Zambia.

5.2. Recommendations

Based on the comprehensive findings of the study, the following specific and actionable recommendations are made:

1. **Strengthen Awareness and Capacity Building through Structured Programs:** Government agencies such as the Ministry of Small and Medium Enterprise

Development, in collaboration with business associations like the Zambia Chamber of Commerce and Industry (ZACCI), should develop and roll out structured training programs specifically targeted at MSMEs. These programs should include workshops, certification courses, and mentorship initiatives focused on practical risk management skills. To ensure wider reach, training should be delivered both in-person and via digital platforms, and should be integrated into existing MSME support programs. Special attention should be given to tailoring materials to different sectors and business sizes within the MSME category.

2. **Promote Risk Transferring through Policy Incentives and Partnerships:** To address the low adoption of risk transferring strategies, the government, in partnership with private insurance companies, should design and subsidize affordable micro-insurance products specifically for MSMEs. Policymakers should consider introducing tax incentives or premium subsidies for MSMEs that enroll in insurance schemes as a way to lower financial barriers. Additionally, industry associations should lead awareness campaigns to demystify insurance, using success stories and case studies to highlight its role in enhancing business resilience. Public-private partnerships (PPPs) could also be leveraged to create sector-specific insurance packages that meet the unique needs of businesses in sectors such as retail, manufacturing, and agriculture.

3. **Establish a National MSME Risk Management Monitoring and Support Framework:**

   The government should create a dedicated framework for the continuous monitoring and evaluation of risk management practices among MSMEs, possibly housed within the Zambia Development Agency (ZDA). This framework should include regular risk preparedness audits, a standardized reporting system for MSMEs to assess their risk management status, and the provision of tailored technical assistance based on audit findings. Furthermore, stakeholder platforms comprising government representatives, MSME associations, financial institutions, and civil society should be formed to periodically review emerging risks, share best practices, and recommend adaptive measures to improve MSME resilience.

5.3. Suggestions for Future Research

The study proposes the following specific suggestions to guide future research:

1. **Longitudinal Studies Using Panel Data**:

Future research should employ longitudinal designs by collecting panel data from the same set of MSMEs over an extended period (e.g., 3–5 years). This approach would allow for tracking changes in risk management practices and preparedness levels over time, particularly in response to major economic or policy shifts. Mixed methods—combining annual surveys with in-depth interviews—could offer both quantitative trends and qualitative insights into evolving practices.

2. **Comparative Cross-Regional or Cross-Country Analyses Using Stratified Sampling**:

   Subsequent studies should consider conducting comparative analyses between MSMEs in Lusaka's Central Business District (LCBD) and those in rural or peri-urban areas, or across different provinces. Employing stratified random sampling would ensure the inclusion of diverse sectors and business sizes. Quantitative comparisons can be complemented by case studies to uncover region-specific factors affecting risk management preparedness and to identify context-driven best practices.

3. **Impact Assessment of External Shocks Using Event Study Methods**:

   Researchers could design studies to specifically assess the impact of external shocks (such as economic downturns, pandemics like COVID-19, or climate-related disasters) on MSME risk management practices. Event study methodology—analyzing data before, during, and after a specific shock—would provide robust evidence on how preparedness strategies shift in real-time. Surveys supplemented by key informant interviews with business owners and policymakers could be used to explore adaptive strategies and the role of institutional support systems during these periods.

5.4. Chapter Summary

This chapter provided a synthesis of the study's major findings, focusing on the types of risk management strategies employed by MSMEs in LCBD and the effect of these strategies on their risk preparedness. The conclusions highlight that while risk avoidance and risk spreading are relatively common, risk transferring remains underutilized despite its strong positive impact on preparedness. Risk retention, conversely, was found to negatively affect preparedness. The chapter emphasized the importance of adopting proactive and diversified risk management approaches to enhance MSME resilience.

Based on these insights, specific and actionable recommendations were proposed, targeting policy interventions, capacity building, and the development of supportive frameworks for continuous improvement in MSME risk management. Suggestions for future research were also outlined, advocating for longitudinal, comparative, and shock-focused studies that employ more robust and targeted methodologies.

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APPENDIX I: EMPIRICAL LITERATURE REVIEW SUMMARY TABLE

Author(s) & Year	Title/Study Focus	Methodology	Key Findings	Relevance to the Study
Woldie et al. (2018)	Risk management in Ethiopian MSMEs	Qualitative analysis of MSME strategies	MSMEs often use a mix of risk avoidance and retention strategies to mitigate threats, avoiding high-risk ventures for stability.	Highlights the importance of balancing risk avoidance and operational security for MSMEs.
Ejiogu & Uche (2018)	Risk retention in small enterprises	Case study analysis	Small enterprises manage operational continuity by retaining minor risks, emphasizing the need to understand risk tolerance limits.	Relevant to assessing how MSMEs in Lusaka balance risk tolerance and operational continuity.
Oyelaran-Oyeyinka (2018)	Diversification as a risk-spreading strategy	Cross-sectoral study	MSMEs minimize market risks through product diversification, stabilizing income and enhancing resilience.	Useful for examining how Lusaka MSMEs might apply diversification to mitigate risks.
Kaur & Singh (2019)	Geographic diversification among Indian MSMEs	Regional market analysis	MSMEs diversify geographically to reduce risks associated with	Provides insights into risk spreading through geographic expansion

			regional economic downturns.	
Barlow & Kivleniece (2016)	Insurance adoption among MSMEs	Survey-based study	MSMEs adopt insurance for property and liability risks, though uptake is limited due to perceived costs and lack of understanding	Explores barriers to insurance adoption that may be relevant to MSMEs in Lusaka.
Mazzarol & Reboud (2020)	Informal networks in MSME risk management	Mixed-methods research	Informal networks provide critical support and enable collective problem-solving to enhance resilience.	Highlights the role of community ties in risk management practices.
Kinyua et al. (2020)	Risk avoidance in Kenyan MSMEs	Survey and interviews	MSMEs avoid complex regulatory environments to minimize risks and simplify operations.	Relevant to understanding regulatory risk avoidance strategies in Lusaka.
Musah et al. (2021)	Collaborative risk spreading in Nigerian MSMEs	Case studies of collaborative ventures	MSMEs reduce risk exposure and enhance stability through partnerships and shared resources.	Highlights the benefits of collaborative approaches to risk management.
Adomako et al. (2020)	Technology-driven risk management in Ghana	Technological adoption survey	MSMEs use digital tools for real-time risk monitoring and response, improving	Emphasizes the potential of technology in

			decision-making and agility.	enhancing MSME risk preparedness.
Shiu & Walker (2020)	Risk management practices in developed vs. developing countries	Comparative study	MSMEs in developed countries adopt formal frameworks, while those in developing countries rely on informal strategies.	Provides a comparative perspective on formal and informal risk management strategies.
Agyapong et al. (2019)	Government support and MSME risk management	Policy impact analysis	Government initiatives, such as financial literacy programs, improve MSME adoption of risk management strategies.	Highlights the importance of supportive policy environments for MSME resilience.
Dube et al. (2021)	Risk retention during the COVID-19 pandemic	Pandemic case studies	MSMEs relying solely on risk retention without contingency planning faced severe operational challenges.	Underlines the necessity of integrating proactive strategies into MSME risk management.
Wang et al. (2021)	Insurance as a risk transfer strategy	Financial performance analysis	MSMEs with insurance showed better preparedness and reduced losses during crises, though uptake was limited.	Explores the effectiveness of insurance as a risk management tool.

Phelps & Linsley (2017)	Collaborative risk management in the UK	Empirical study	MSMEs in collaborative networks experienced fewer disruptions and improved preparedness for economic uncertainties.	Reinforces the value of collaboration for improving resilience among MSMEs.
Ritchie & Brindley (2007)	Crisis management in MSMEs	Hospitality sector case studies	MSMEs with defined crisis management plans recovered faster from adverse events, highlighting proactive measures' importance.	Relevant for assessing the role of crisis planning in MSME risk management preparedness.
Idris et al. (2021)	Risk retention strategies among Malaysian SMEs	Financial strategy analysis	SMEs with established emergency funds showed greater stability during downturns.	Highlights the significance of financial preparedness in risk retention.
Akinboade et al. (2018)	Risk spreading through diversification	Comparative analysis	MSMEs using geographic and product diversification outperformed peers by reducing local economic shocks' impact.	Offers insights into diversification's effectiveness as a risk management strategy.

Matanda & Ndubisi (2013)	Regulatory environments and risk management	Regulatory framework evaluation	Supportive regulations enhance MSME adoption of comprehensive risk management strategies.	Provides context for the role of regulations in shaping risk management among MSMEs in Lusaka.
Hmoud & Abuhashesh (2021)	Technology in risk management	Digital tools case study	MSMEs using digital tools adapted better to disruptions and improved market resilience.	Highlights the role of technology in improving risk preparedness.

APPENDIX II: SURVEY QUESTIONNAIRE

THE UNIVERSITY OF ZAMBIA

This study is intended to assess the Micro Small and Medium Enterprises (MSMEs)'s risk management preparedness. The study area for this assignment is Lusaka's Central Business District (CBD). This is in partial fulfillment of the requirements for the award of degree of Master of Business Administration (Finance) at the University of Zambia, Great East Road Campus.

As indicated above, the focus area of study is on MSME's preparedness in management of business risk, hence our selection of your business to provide useful information to contribute towards the completion of this study. Your participation in this research is entirely voluntary. It is your choice whether to participate or not. Your ideas and viewpoint are an important part of study. It should take 5-10 minutes to complete the survey. You can rest be assured that all the information you supply will be treated with the utmost discretion/confidentiality as this exercise is exclusively for **academic purposes.** Please spare some few minutes of your precious time to fill blanks provided or tick the option which best answers the question.

Researcher's Name: Amukena Joseph Lubasi

Contact details: 0979486419, amukenal@yahoo.com

SECTION 1. COMPANY INFORMATION/PROFILE

1. Business Name: _____

2. Contact Person: _____

3. Position/Title: _____

4. Number of Years in Operation: How long has your business been in operation? Please tick (√) one option

•[ ] Less than 1 year

• [ ] Between 1 - 2 years

• [ ] Between 2–3 years

• [ ] Between 4 – 5 years

•[ ] Over 5 years

5. Are you the owner of the business? Please tick(√) one option

•[ ] Yes •[ ] No

6. How is the ownership of the business? Please tick(√) one option

•[ ] Family owned • [ ] Single Individual/sole ownership •[ ] Partnership

7. Is the Business Woman led or Man led? Please tick (√) one option

• [ ] Women led • [ ] Man led •[ ] Both Woman &Man led

8. Please indicate the number of employees employed by your business. Please tick (√) one option

• [ ] Between 1-5 •[ ] Between 5-10 •[ ] Over 10

9. How old are you (respondent)? Please tick (√) one option

[ ] Between 15-24 []25-34 [ ] 35-44 [ ] 45-54 [ ] 55-64 [ ] 65+

10. What is your highest educational attainment? Please tick (√) one option

•[ ] No education •[ ] Primary •[ ] Secondary •[ ] Tertially

11. Type of Business:

[ ] Manufacturing

[ ] Retail

[ ] Services

[ ] Agriculture

[ ] Other (please specify): _____

SECTION 2: INFORMATION ON RISK MANAGEMENT STRATEGIES AND PREPAREDNESS:

12. Which of the following risk management strategies does your MSME currently employ? (Select one that apply)

[ ] Risk Avoidance (avoiding activities that may pose risks)

[ ] Risk Retention (accepting certain risks without external mitigation)

[ ] Risk Spreading (diversifying operations or income sources)

[ ] Risk Transferring (using insurance or financial instruments to mitigate risks)

[ ] Other (please specify): _____

13. What challenges, if any, do you face in implementing these risk management strategies? (Select all that apply)

[ ] Financial constraints (e.g., high costs of insurance, training)

[ ] Lack of knowledge or training on risk management practices

[ ] Limited access to risk management tools or resources

[ ] Perceived ineffectiveness of certain strategies

[ ] Other (please specify): _____

14. Have you prepared a risk management plan? (Existence of a risk management plan).

[ ] Not prepared

[ ] Slightly prepared

[ ] Moderately prepared

[ ] Prepared

[ ] Very well prepared

15. Have you prepared an insurance coverage? (Availability of insurance coverage)

[ ] Not prepared

[ ] Slightly prepared

[ ] Moderately prepared

[ ] Prepared

[ ] Very well prepared

16. Have you prepared financial reserves for emergencies? (Financial reserves for emergencies)

[ ] Not prepared

[ ] Slightly prepared

[ ] Moderately prepared

[ ] Prepared

[ ] Very well prepared

17. Have you prepared or trained your employees on risk awareness? (Employee training on risk awareness)

[ ] Not prepared

[ ] Slightly prepared

[ ] Moderately prepared

[ ] Prepared

[ ] Very well prepared

18. Do you conduct or are prepared for regular risk assessments? (Regular risk assessments)

[ ] Not prepared

[ ] Slightly prepared

[ ] Moderately prepared

[ ] Prepared

[ ] Very well prepared

19. Do you diversify or are prepared to diversify your products/services? (Diversification of products/services)

[ ] Not prepared

[ ] Slightly prepared

[ ] Moderately prepared

[ ] Prepared

[ ] Very well prepared

20. Please provide any additional comments on how your MSME manages risks or suggestions for improving risk management practices in your sector:

_____

----------End----------

APPENDIX III: APPROVAL OF STUDY LETTER

THE UNIVERSITY OF ZAMBIA

DIRECTORATE OF RESEARCH AND GRADUATE STUDIES

Great East Road Campus | P.O. Box 32379 | Lusaka10101 | Tel: +260-211-290 258/291 777 **Fax**: (+260)-211-290 258/253 952 | E-**mail**: director.drgs@unza.zm | Website: www.unza.zm

APPROVAL OF STUDY

IORG No.
0005376 HSSREC
IRB No. 00006464

REF NO. HSSREC-2023-NOV-008

4th December, 2023

Mr. Joseph Lubasi Amukena
The University of Zambia
P.O. Box 32379
LUSAKA

Dear Amukena

RE: "AN ASSESSMENT OF MICRO SMALL AND MEDIUM ENTERPRISES (MSMEs)'s MANAGEMENT PREPAREDNESS. A CASE OF MSMS IN LUSAKA'S CENTRAL BUSINESS DISTRICT."

Reference is made to your submission of the protocol captioned above.

The HSSREC resolved to approve this study and your participation as Principal Investigator for a period of one year.

Specific conditions will apply to this approval. As Principal Investigator it is your responsibility to ensure that the contents of this letter are adhered to. If these are not adhered to, the approval may be suspended. Should the study be suspended, study sponsors and other regulatory authorities will be informed.

REVIEW TYPE	**ORDINARY REVIEW**	**APPROVAL NO. HSSREC-2023-NOV-008**
Approval and Expiry Date	Approval Date: 4th December, 2023	Expiry Date: 3rd December, 2024
Protocol Version and Date	Version - Nil.	3rd December, 2024
Information Sheet, Consent Forms and Dates	English.	To be provided
Consent form ID and Date	Version - Nil	To be provided
Recruitment Materials	Nil	Nil
Other Study Documents	- Questionnaire - Interview Guide	
Number of Participants Approved for Study		

Conditions of Approval

- No participant may be involved in any study procedure prior to the study approval or after the expiration date.

- All unanticipated or Serious Adverse Events (SAEs) must be reported to HSSREC

within 5 days.

- All protocol modifications must be approved by HSSREC prior to implementation unless they are intended to reduce risk (but must still be reported for approval). Modifications will include any change of investigator/s or site address.

- All protocol deviations must be reported to HSSREC within 5 working days.

- All recruitment materials must be approved by HSSREC prior to being used.

- Principal investigators are responsible for initiating Continuing Review proceedings. HSSREC will only approve a study for a period of 12 months.

- It is the responsibility of the PI to renew his/her ethics approval through a renewal application to HSSREC.

- Where the PI desires to extend the study after expiry of the study period, documents for study extension must be received by HSSREC at least 30 days before the expiry date. This is for the purpose of facilitating the review
submissions" and will incur a penalty fee of K500.00. No study shall be renewed whose documents are submitted for renewal 30 days after expiry of the certificate.

- Every 6 (six) months a progress report form supplied by The University of Zambia Humanities and Social Sciences Research Ethics Committee as an IRB must be filled in and submitted to us. There is a penalty of K500.00 for failure to submit the report.

- When closing a project, the PI is responsible for notifying, in writing or using the Research Ethics and Management Online (REMO), both HSSREC and the National Health Research Authority (NHRA) when ethics certification is no longer required for a project.

- In order to close an approved study, a Closing Report must be submitted in writing or process. Documents received within 30 days after expiry will be labelled "late

through the REMO system. A Closing Report should be filed when data collection has ended and the study team will no longer be using human participants or animals or secondary data or have any direct or indirect contact with the research participants or animals for the study.

- Filing a closing report (rather than just letting your approval lapse) is important as it assists HSSREC in efficiently tracking and reporting on projects. Note that some funding agencies and sponsors require a notice of closure from the IRB which had approved the study and can only be generated after the Closing Report has been filed.
- A reprint of this letter shall be done at a fee.
- All protocol modifications must be approved by HSSREC by way of an application for an amendment prior to implementation unless they are intended to reduce risk (but must still be reported for approval). Modifications will include any change of investigator/s or site address or methodology and methods. Many modifications entail minimal risk adjustments to a protocol and/or consent form and can be made on an Expedited basis (via the IRB Chair). Some examples are: format changes, correcting spelling errors, adding key personnel, minor changes to questionnaires, recruiting and changes, and so forth. Other, more substantive changes, especially those that may alter the risk-benefit ratio, may require Full Board review. In all cases, except where noted above regarding subject safety, any changes to any protocol document or procedure must first be approved by HSSREC before they can be implemented.

Should you have any questions regarding anything indicated in this letter, please do not hesitate to get in touch with us at the above indicated address.

On behalf of HSSREC, we would like to wish you all the success as you carry out your study.

Yours faithfully,

Dr. J.I. Ziwa

DR. J. I. Ziwa
CHAIRPERSON

THE UNIVERSITY OF ZAMBIA HUMANITIES AND

SOCIAL SCIENCES RESEARCH ETHICS COMMITTEE - IRB

cc**:** Director, Directorate of Research and Graduate Studies

Assistant Director (Research), Directorate of Research and Graduate Studies Assistant Registrar (Research), Directorate of Research and Graduate Studies

APPENDIX IV: PARTICIPANT INFORMATION SHEET

HSSREC FORM 1b

THE UNIVERSITY OF ZAMBIA

DIRECTORATE OF RESEARCH AND GRADUATE STUDIES

HUMANITIES AND SOCIAL SCIENCES RESEARCH ETHICS COMMITTEE

Telephone: +260-211-290258/293937 P O Box 32379

Fax: +260-211-290258/293937 Lusaka, Zambia

E-mail drgs@unza.zm

PARTICIPANT INFORMATION SHEET

(i) Information Sheet

I am a student at the University of Zambia Graduate School of Business conducting a research which is part of the requirements in fulfillment for the award of a Master's degree in Business Administration (Finance) at the University of Zambia, Great East Road Campus. My Research topic is entitled "***An assessment of Micro Small and Medium Enterprises (MSMEs)'s risk management preparedness. A case of MSMEs in Lusaka's Central Business District***". I am going to give you information and invite you to be part of this research. Your participation in this

research is entirely voluntary. It is your choice whether to participate or not. Further, this consent form may contain words that you do not understand. Please ask me to stop as we go through the information and I will take time to explain.

MSMEs face a lot of challenges that substantially hinder their progress, growth and subsequently their contribution to economic development. As MSMEs conduct their day-to-day business, they are faced with numerous risks, that if left unchecked, have the potential to terminate the existence of the MSMEs or threaten its sustainability, in short, risk is a reality in business. Some scholars have defined risks as anything that has a negative impact on business objectives if it occurred.

In this light, as an entrepreneur, your ideas and viewpoint on the study area of risk management preparedness among MSMEs are an important part of study. I believe you will provide useful information to contribute towards the completion of this study. It should take 5-10 minutes to complete the survey questionnaire. You can rest be assured that all the information you supply will be treated with the utmost discretion/confidentiality as this exercise is exclusively for **academic purposes.**

(ii) Consent

Participant consent

I have read the foregoing information, or it has been read to me. I have had the opportunity to ask questions about it and any questions I have been asked have been answered to my satisfaction. I consent voluntarily to be a participant in this study.

Print Name of Participant_____

Signature of Participant _____

Date _____

Day/month/year

If illiterate [1]

I have witnessed the accurate reading of the consent form to the potential participant, and the individual has had the opportunity to ask questions. I confirm that the individual has given consent freely.

Print name of witness_____ Thumb print of participant

Signature of witness _____

Date _____

Day/month/year

Researcher Consent

I have accurately read out the information sheet to the potential participant, and to the best of my ability made sure that the participant understands.

I confirm that the participant was given an opportunity to ask questions about the study, and all the questions asked by the participant have been answered correctly and to the best of my ability. I confirm that the individual has not been coerced into giving consent, and the consent has been given freely and voluntarily.

A copy of this ICF has been provided to the participant.

Print Name of Researcher/person taking the consent_____

[1] A literate witness must sign (if possible, this person should be selected by the participant and should have no connection to the research team). Participants who are illiterate should include their thumb print as well.

Signature of Researcher /person taking the consent_____

Date _____

Day/month/year