AN ANALYSIS OF FINANCIAL RISK MANAGEMENT STRATEGIES AMONG SMALL AND MEDIUM SCALE BUSINESSES IN MUBI METROPOLIS

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ABSTRACT

This study investigates the financial risk management practices among Small and Medium Enterprises (SMEs) in Mubi Metropolis, with the aim of understanding how these practices influence business performance, particularly profitability. A survey research approach was employed, involving a sample of 300 SMEs determined using the Taro Yamane formula. The study utilized both descriptive and inferential statistical methods to analyse the data, providing a comprehensive overview of the financial risk landscape within the SME sector in this region. The regression analysis focused on seven key financial risks: liquidity, credit, operational, market, interest rate, currency, and compliance risks. The results reveal that these financial risks significantly impact the profitability of SMEs. Specifically, liquidity, compliance, and operational risks were found to have a negative effect on profitability, emphasizing the critical need for SMEs to adopt robust financial risk management strategies. The study also explores the socioeconomic characteristics of business managers in Mubi, revealing a diverse and dynamic group with varying levels of experience, education, and backgrounds. The frequency distribution of SMEs by type indicates a vibrant local economy, with retail shops, sachet water production, block making, and poultry farming being particularly prominent sectors. The analysis of financial risk management practices among these SMEs shows a diverse approach, with a strong emphasis on cash flow management, budgeting, and forecasting. In conclusion, this study highlights the significant impact of financial risks on SME profitability and the importance of adopting effective risk management practices. The findings provide valuable insights for business managers and policymakers aiming to support the sustainability and growth of SMEs in Mubi Metropolis. The study recommends that both business managers and policymakers must prioritize effective financial risk management to enhance the financial health and performance of SMEs.

Keywords: SMEs, financial risk management, profitability, regression analysis, Mubi Metropolis.

1.1 Introduction

There is a wide recognition of Small and Medium Enterprises (SMEs) as a catalyst for facilitating economic growth and development on a national and global scale (Ajemunigbohun et al., 2020; Dayour, Adongo, & Kimbu, 2020; Ledwin & Watson, 2019).

The SMEs' roles are crucial in shaping the economic fabric of nations, fostering innovation, creating employment opportunities, and contributing significantly to the overall socio-economic advancement of communities. Acknowledged by scholars and researchers, including Dayour et al., (2020), and Ledwin & Watson (2019), SMEs constitute a moving force that goes beyond mere economic transactions, influencing the broader developmental landscape of both local and global contexts.

Previous studies as in Ayyagari et al. (2011), Chodokufa (2016), and Ruchkina et al. (2017) affirm that quite a number of businesses in Africa are made up of SMEs. These SMEs, as evidenced by these researchers, play a pivotal role in the economic landscape by accounting for approximately 60 percent of private sector job opportunities in the continent. The substantial role of SMEs in shaping economic landscapes, as emphasized by Chodokufa (2016), and Ruchkina et al. (2017), necessitates a closer examination of the challenges that accompany their operations. The consensus among these researchers is that inherent multitude of opportunities presented by SMEs can be fully harnessed and expanded if the associated risks are effectively identified and managed.

Similarly, Ibiwoye et al. (2020) explore deeper into the complexities of SMEs revealing that the survival and growth of these enterprises are intricately linked to their ability to navigate and mitigate various risks. These risks, pervasive in both the economic and social dimensions, emerge as critical factors influencing the trajectory of SMEs. Thus, understanding and managing these risks is fundamental in ensuring the resilience and sustained success of SMEs, thereby underscoring the complex interplay between risk management and the viability of small and medium enterprises in contemporary economic landscapes. The consequential impact is most prominently manifested through a gradual enhancement in the financial performance of SMEs, a fortification of their standing within the business segment, and a marked improvement in the quality of services or products offered to customers, all contributing to heightened employee productivity (Psarska et al., 2019).

Research conducted by Grondys et al. (2021) and Lima and Verbano (2019) sheds light on a critical aspect of Small and Medium Enterprises (SMEs), emphasizing that operators of these enterprises often perceive risk identification as a burdensome cost rather than a strategic imperative aimed at safeguarding their business goals and objectives. The findings reveal a notable challenge faced by SMEs, where low financial capacity and insufficient expertise in risk management contribute to a perception that identifying risks is more of a financial burden than an essential task integral to securing the long-term viability of their businesses. In ideal risk management, a prioritization process is followed whereby the risks with the greatest loss and the greatest probability of occurring are handled first, and risks with lower probability of occurrence and lower loss are handled in descending order. In practice the process can be very difficult and balancing between risks with a high probability of occurrence but lower loss versus a risk with high loss, but lower probability of occurrence can often be mishandled (Krishna, 2008).

Hence, the objectives of this study are to identify and assess financial risk management practices/approaches use by SMEs in Mubi Metropolis and to examine the extent of the impact of financial risks on their business performance. This paper is structured into introduction, literature review, methodology, results and discussion as well as conclusion and recommendations.

2.1   Literature Review

Financial risk management within the context of SMEs has evolved significantly since the 20th century. In a seminal work of Kraus et al. (2023), the transformation in financial risk management practices among SMEs is traced from an erstwhile informal and localized approach to a contemporary, innovative, and technologically advanced paradigm. Arhenful et al. (2023) assert that technology, including artificial intelligence provide viable financial risk management solutions for SMEs. The integration of modern technology has played a fundamental part in shaping SMEs' approaches to financial risk management, effectively reducing their exposure to various financial risks. Similarly, the use of technology as posited by Dahquist and Knight (2022) affirm that firms enhance their value by strategically hedging against risks, aiming to minimize their overall exposure. The study posits that risk minimization directly contributes to strengthening the profitability of SMEs. Faqihi and Miah (2023) assert that technology improves managerial strategies for SMEs to effectively mitigate financial risks. They highlight the potential of technology in enhancing cybersecurity measures and promoting resilience planning. In the face of global uncertainties, these proactive measures become essential for SMEs, ensuring not only risk mitigation but also the adaptability and sustainability of businesses in an ever-changing economic landscape.

2.2   Importance of Financial Risk Management for SMEs

Financial risk management in SMEs is important in that it reduces economic uncertainties and ensures sustained growth and stability in the dynamic market scenery. According to Zhu et al. (2023), SMEs, operating amidst ever-changing market trends and economic conditions, benefit significantly from financial risk management practices. These practices empower SMEs to not only identify but also mitigate uncertainties, thus minimizing the impact of unforeseen events. Consequently, financial risk management emerges as a linchpin for the survival and flourishing growth of SMEs. Ade et al. (2020) further illustrate the significance of financial risk management in determining the survival of SMEs. They emphasize that the practice of financial risk management is linked to the resilience and continued existence of these enterprises. Entrepreneurs, according to the study, are advised to actively engage in financial risk management to exert a positive influence on the sustained survival of their businesses. In the pursuit of survival, growth, and overall development, effective financial risk management strategies become instrumental for SMEs to navigate through financial crises, economic downturns, and unforeseen disruptions in business operations, as noted by Ricardianto et al. (2023). Kengatharan (2019) contends that SME adherence to regulatory frameworks and financial ethics fosters transparency in the market, creating an environment where investors feel more secure in deploying their capital. This, in turn, stimulates increased investment opportunities, allowing SMEs to access the necessary capital for growth and expansion from the pool of funds harnessed by these confident investors. In essence, financial risk management emerges not only as a shield against uncertainties but as a catalyst for building investor confidence and unlocking avenues for strategic growth and expansion for SMEs.

2.3   Consequences of Inadequate Practice of Financial Risk Management by SMEs

Despite the numerous advantages associated with effective financial risk management for SMEs, the repercussions of inadequate financial risk management practices cannot be understated. Kruger and Meyer (2021) assert that SMEs often grapple with insufficient resources to develop and manage financial risks adequately. This inherent limitation increases their vulnerability to various risks, ultimately compromising their sustainability. This insight aligns with the findings of another study conducted by Dvorsky et al. (2020), which emphasizes the far-reaching consequences of SMEs failing to fulfil their debt obligations, meet customer demands, and sustain financial deficits or losses. These outcomes collectively underscore the adverse effects of a lack of financial risk management, posing a serious threat to the continued existence of such firms. The scarcity of resources available to SMEs for comprehensive financial risk management, as noted by Kruger and Meyer (2021), leaves them exposed to an elevated level of risk. This heightened vulnerability not only undermines their operational resilience but also poses a tangible threat to their overall sustainability. Dvorsky et al. (2020) further highlight that the aftermaths of inadequate financial risk management manifest in the inability of SMEs to fulfil their debt obligations, resulting in financial strain and potential insolvency. Moreover, the inability to meet customers' demands and the occurrence of deficits or losses reflected in financial statements contribute to a compounding adverse effect, jeopardizing the very existence of these enterprises.

2.4   Factors that Influence Adoption of Financial Risk Management Strategies by SMEs

The adoption of financial risk management strategies by Small and Medium Enterprises (SMEs) is shaped by a multitude of influential factors. Araujo Lima (2021) underscores the significance of industry type, emphasizing the need for SMEs to align their risk management practices with the specific challenges prevalent in their operating sectors. Industries characterized by higher inherent risks demand a more robust and tailored financial risk management approach to ensure resilience in the face of sector-specific uncertainties. Additionally, Abdullahi (2019) sheds light on the intricate relationship between capital structure and risk management adoption. Striking a delicate balance between debt and equity becomes imperative for SMEs to avoid bankruptcy costs, compelling them to adopt sophisticated financial risk management practices.

Furthermore, the regulatory environment plays a crucial role in influencing SMEs' adoption of risk management strategies. Araujo Lima's (2021) insight highlights the proactive approach of SMEs in conforming to legal requirements and ethical standards through the adoption of financial risk management practices. This not only ensures regulatory compliance but also fortifies SMEs against potential legal challenges, contributing to their overall sustainability.

Easy access to capital emerges as a key catalyst influencing SMEs' adoption of financial risk management strategies. Araujo Lima's (2021) perspective underscores that SMEs with seamless access to financial resources are motivated to mitigate risks associated with the cost of capital. By adopting financial risk management practices, these enterprises can effectively manage and optimize their capital structures, fostering stability and growth.

2.5 Best Practices and Strategies of Financial Risk Management by SMEs

The implementation of effective financial risk management practices by Small and Medium Enterprises (SMEs) involves a combination of best practices and strategies, as elucidated by Zayed et al. (2022), Kruger and Meyer (2021), and Ade et al. (2020). These experts assert that efficient execution of financial risk management practices is not merely a safeguard but a catalyst for the survival and growth of SMEs. A fundamental best practice highlighted by these scholars is the rigorous evaluation of risks. SMEs are encouraged to cultivate the ability to identify and assess risks comprehensively. This involves leveraging the expertise of professionals in risk management who can categorize various types of risks such as market risk, credit risk, operational risk, and liquidity risk affecting the business. By systematically evaluating risks, SMEs can develop targeted strategies to mitigate potential threats and enhance their overall risk resilience.

Diversification emerges as another crucial best practice in financial risk management for SMEs. This strategy involves spreading the firm's investments and market presence to avoid dependency on a single investment outlet or specific customer. By diversifying their portfolio and customer base, SMEs can effectively mitigate financial risks associated with dependence on a singular revenue stream or market segment, thus enhancing their overall stability.

Incorporating advanced technology is identified as a strategic best practice employed by SMEs in their financial risk management efforts. SMEs can eliminate operational risks that may impede production efficiency with the use of state-of-the-art technology into their production processes. The seamless incorporation of technology not only enhances operational resilience but also positions SMEs to adapt and thrive in dynamic business environments. Hedging strategies represent a significant financial risk management practice adopted by SMEs, as emphasized by Dahlquist and Knight (2022). Hedging involves deliberate actions taken by companies to reduce their exposure to various risks, including interest rate risk, market risk, and foreign exchange risk.

2.6 Literature Gap

While a considerable body of literature had explored the intricacies of financial risk management across various business sectors, there exists a noticeable short fall in research pertaining specifically to the financial management strategies employed by small-scale businesses within Mubi metropolis. While studies offer valuable insights into financial risk management practices at a broader level, the scarcity of focused investigations on small-scale enterprises in this particular geographic context raises the necessity for dedicated research. This identified gap in the literature underlines the importance of addressing the unique financial management challenges and strategies that characterize small-scale businesses operating within the Mubi metropolis. The local dynamics, economic conditions, and contextual factors specific to this geographical area may significantly influence the financial decision-making processes of small businesses, thereby necessitating a targeted exploration.

3.1   Methodology

The study employs a survey research design to thoroughly analyse the financial risk management strategies of small and medium scale businesses in Mubi metropolis within the specific context of Adamawa State, Nigeria. Approach aims to provide a holistic and distinctive perspective to achieve the objectives of the study. The study employs quantitative and quantitative methods to gather empirical data on the financial risk management strategies in use by SMEs in Mubi. The primary instrument for data collection was structured questionnaires, methodically designed to elicit specific responses related to the financial risk management practices within the selected businesses. The structured questionnaires were carefully crafted to encompass a range of variables pertinent to financial risk management.

3.2   Sampling Procedure and Sample Size

The selection of SMEs in Mubi was done through purposive sampling technique, a deliberate and strategic approach designed to ensure the representation of a diverse array of industries and business sizes within the metropolis. In this case, businesses were chosen purposefully to capture a wide spectrum of economic activities. This method enables the research team to focus on businesses that are particularly relevant to the study's context, ensuring that the sample is not only representative but also rich in the variety of financial risk management practices. The study's sample size is 300 SMEs which was determined using the Taro Yamane's Formula.

3.3   Data Collection Method

The data collection process leverages an innovative mobile-based tool, specifically KoboToolKit (Kobocollect), presenting a myriad of advantages as a paperless and technologically advanced method. It aligns seamlessly with environmental sustainability objectives by eliminating paper waste and its associated ecological impact. This eco-friendly approach underlines the research's commitment to minimizing its environmental footprint.

3.4   Data Analysis Approach

The method of data analysis for this study embraces a comprehensive strategy, combining both descriptive and inferential methods to derive distinctive insights. The descriptive analysis component employs a multifaceted approach involving graphs, charts, and summary statistics. This method aims to present a clear and detailed depiction of the data, facilitating a thorough understanding of the key patterns and trends. The inferential method employs multiple regression, a powerful statistical tool utilized to discern the influence of multiple independent variables on a dependent variable.

4.1   RESULTS AND DISCUSSION

This section presents the findings of the study and provides an in-depth analysis of the results. The analysis begins with a descriptive overview of the socioeconomic characteristics of the business managers, types of businesses undertaken by the SMEs, followed by an examination of the financial risk management practices employed by SMEs in Mubi Metropolis. Subsequently, the results of the regression analysis are discussed, highlighting the impact of various financial risks on business performance, particularly

profitability. The discussion integrates these findings with relevant theoretical perspectives and explores their implications for both business practice and policy development. By linking the empirical results to broader economic and managerial frameworks, this section provides a comprehensive understanding of how financial risk management influences the success and sustainability of SMEs in Mubi

4.2   Socioeconomic Characteristics of SMEs' Managers in Mubi

This section explores the socioeconomic profiles of the managers leading SMEs in Mubi Metropolis. Understanding these characteristics is crucial, as factors such as gender, age, educational background, and years of experience can significantly influence decision-making processes, risk management practices, and overall business performance. By analysing the distribution of these characteristics, this section provides insights into the diversity and dynamics of the leadership within the SME sector in Mubi, shedding light on how these attributes may affect the strategic direction and success of these enterprises.

Table 1: Frequency Distribution of Socioeconomic Characteristics of Business Managers

Socioeconomic Characteristic	Category	Number of Managers	Percentage
Gender	Male	180	60.0%
	Female	120	40.0%
Age	18-25 years	50	16.7%
	26-35 years	100	33.3%
	36-45 years	80	26.7%
	46 years and above	70	23.3%
Educational Background	No Formal Education	20	6.7%
	Primary Education	50	16.7%
	Secondary Education	100	33.3%
	Tertiary Education	130	43.3%
Years of Experience	Less than 5 years	80	26.7%
	5-10 years	120	40.0%
	11-20 years	60	20.0%
	More than 20 years	40	13.3%
Marital Status	Single	110	36.7%
	Married	160	53.3%
	Divorced/Widowed	30	10.0%
Total		**300**	**100%**

Source: Field Survey, 2024.

Table 1 outlines the distribution of the socioeconomic characteristics of business managers in Mubi, based on a sample of 300 individuals. This distribution provides valuable insights into the demographic, educational, and experiential profiles of those who lead Small and Medium Enterprises (SMEs) in the region, shedding light on the diversity and potential influences on business management practices.

Gender Distribution

The gender distribution shows that 180 managers **(60.0%)** are male**,** while 120 managers **(40.0%)** are female. This indicates that while men dominate the business management landscape, a significant proportion of women are also engaged in managing SMEs. The substantial presence of female business managers highlights the important role that women play in the entrepreneurial ecosystem in Mubi, contributing to economic activities and decision-making processes. The gender diversity in business leadership may have implications for business strategies, with potential differences in management styles and risk preferences between male and female managers.

Age Distribution

The age distribution of business managers is diverse, with the largest group being those aged 26-35 years **(33.3%),** followed by those aged 36-45 years **(26.7%).** Managers aged 46 years and above account for 23.3%**,** while the youngest group, aged 18-25 years**,** represents 16.7% of the sample. This age distribution suggests that the majority of business managers are in their prime working years, with a good mix of youthful energy and mature experience. The presence of younger managers (under 35) could indicate a dynamic and potentially innovative business environment, as younger entrepreneurs may bring fresh perspectives and a willingness to adopt new technologies. Meanwhile, the significant proportion of older managers likely provides stability and the benefit of experience in navigating the complexities of business management.

Educational Background

In terms of educational background**,** 130 managers **(43.3%)** have tertiary education, making them the most educated group among the business managers. This is followed by those with secondary education **(**33.3%**),** primary education **(**16.7%), and a smaller group with no formal education (6.7%). The high percentage of managers with tertiary education suggests that a significant number of business leaders in Mubi possess advanced knowledge and skills, which could enhance their ability to manage complex business operations and make informed decisions. The presence of managers with only primary or no formal education indicates that there are still barriers to higher education, but these individuals have nonetheless taken on leadership roles, likely relying on practical experience and local knowledge.

Years of Experience

The distribution of years of experience shows that 120 managers **(40.0%)** have 5-10 years of experience, making it the most common category. This is followed by 80 managers **(26.7%)** with less than 5 years of experience, 60 managers **(20.0%)** with 11-20 years, and 40 managers **(13.3%)** with more than 20 years of experience. This distribution suggests that a substantial number of business managers have a moderate level of experience, which may contribute to effective management practices and informed decision-making. The presence of both relatively inexperienced managers and those with extensive experience

indicates a mix of fresh approaches and seasoned insights into the management of SMEs, which can be beneficial for adapting to changes and challenges in the business environment.

Marital Status

The marital status distribution reveals that the majority of business managers are married (53.3%), followed by those who are single (36.7%), and a smaller group that is divorced or widowed (10.0%). The high percentage of married managers may suggest stability and possibly a higher level of financial responsibility, as married individuals might be more likely to pursue stable and sustainable business operations to support their families. The presence of single managers indicates that a considerable number of individuals are managing businesses at a potentially earlier stage in their personal lives, which could influence their risk tolerance and long-term planning strategies.

4.3   Types of SMEs in Mubi

This section examines the various types of Small and Medium Enterprises (SMEs) operating in Mubi Metropolis, with a focus on how the nature of these businesses influences their financial risk management practices. Different types of SMEs face distinct financial risks depending on their industry, scale, and operational complexities. Understanding the distribution of SMEs by type provides crucial insights into the specific financial challenges they encounter and the strategies they employ to manage these risks.

Table 2: Distribution of Different Types of SMEs in Mubi

Type of SME	Number of SMEs	Percentage
Sachet Water Production	60	20.0%
Block Making	50	16.7%
Poultry Farming	40	13.3%
Retail Shops	70	23.3%
Tailoring/Fashion Designing	30	10.0%
Carpentry and Woodwork	25	8.3%
Others	25	8.3%
Total	300	100%

Source: Field Survey, 2024.

The table 2 illustrates the distribution of various types of Small and Medium Enterprises (SMEs) operating in Mubi, with a total of 300 businesses represented. This distribution offers insights into the composition of the SME sector in the metropolis, highlighting the dominant industries and the diversity of entrepreneurial activities.

Retail Shops constitute the largest category, with 70 SMEs (accounting for 23.3% of the total). The prominence of retail shops suggests that trade and commerce play a significant role in Mubi's economy. Retail businesses typically serve as the primary point of interaction between producers and consumers, providing essential goods and services to the local population. The high percentage of retail shops indicates a strong demand for consumer goods and reflects the importance of this sector in driving local economic activity.

Sachet Water Production follows closely, with 60 SMEs (20.0%). This sector's substantial representation underscores the demand for affordable and accessible drinking water in Mubi. Given the challenges related to access to clean and safe water in many parts of Nigeria, sachet water production has become a vital industry, providing a critical service while also offering profitable business opportunities.

Block Making, with 50 SMEs (16.7%), represents a significant portion of the SME landscape. This industry is crucial in the construction sector, supplying essential materials for building infrastructure. The prevalence of block-making businesses suggests ongoing construction and development activities in Mubi, potentially driven by population growth, urbanization, and efforts to rebuild and improve local infrastructure.

Poultry Farming, adopted by 40 SMEs (13.3%), reflects the importance of agriculture and food production in the region. Poultry farming is a key source of income and food security, providing meat, eggs, and other poultry products to the local market. The presence of a notable number of poultry farms indicates that this sector is a significant contributor to both the economy and the dietary needs of the population.

Tailoring/Fashion Designing is represented by 30 SMEs (10.0**%**). This industry highlights the role of the creative sector in Mubi, with tailoring and fashion design businesses catering to the clothing needs of the community. The presence of these SMEs suggests a demand for customized and locally produced garments, which may be driven by cultural preferences, economic considerations, and the desire for unique fashion items.

Carpentry and Woodwork, along with Other categories, each comprise 25 SMEs (8.3%). The carpentry and woodwork sector indicates a focus on producing furniture, construction materials, and other wooden products, which are essential in both residential and commercial settings. The "Other" category includes SMEs engaged in various less common or niche activities, demonstrating the diverse range of entrepreneurial ventures in Mubi.

4.4   Financial Risk Management Practices Adopted by SMEs in Mubi

This section explores the financial risk management practices employed by Small and Medium Enterprises (SMEs) in Mubi Metropolis. Effective financial risk management is vital for the sustainability and profitability of SMEs, as it helps businesses navigate uncertainties and protect against potential losses. The analysis provides an overview of the various strategies adopted by these enterprises, such as cash flow management, budgeting, debt management, and insurance. By examining these practices, this section

highlights how SMEs in Mubi manage financial risks and the effectiveness of these strategies in ensuring business stability and growth.

Table 3: Distribution of SMEs' Financial Management Practices in Mubi

Financial Risk Management Practice	Number of SMEs	Percentage
Budgeting and Forecasting	70	23.3%
Insurance	50	16.7%
Debt Management	40	13.3%
Cash Flow Management	80	26.7%
Internal Controls	30	10.0%
Investment Diversification	20	6.7%
Others	10	3.3%
Total	300	100%

Source: Field Survey, 2024.

Table 3 shows the distribution of financial risk management practices used by SMEs in Mubi. This distribution highlights the prevalence of various risk management strategies and reflects the priorities and challenges faced by SMEs in this region.

Cash Flow Management emerges as the most commonly adopted practice, with 80 SMEs (representing 26.7% of the total) prioritizing this approach. This emphasis on cash flow management suggests that maintaining liquidity is a critical concern for SMEs, likely due to the need to ensure that they can meet short-term obligations and avoid cash shortages that could disrupt operations. Effective cash flow management is essential for sustaining day-to-day business activities, particularly in environments where access to external financing may be limited.

Budgeting and Forecasting is the second most utilized practice, adopted by 70 SMEs (23.3%). This practice indicates that a significant proportion of SMEs are focused on planning and predicting future financial needs, revenues, and expenses. By engaging in budgeting and forecasting, these businesses aim to anticipate financial challenges and opportunities, thereby positioning themselves to make informed decisions that enhance their financial stability and growth prospects.

Insurance, adopted by 50 SMEs (16.7%), reflects an awareness of the need to protect the business against unforeseen risks, such as property damage, liability claims, or other disruptions. The use of insurance suggests that these businesses recognize the importance of transferring certain risks to third parties as a way to safeguard their assets and ensure business continuity in the face of potential adverse events.

Debt Management, chosen by 40 SMEs (13.3%), underscores the importance of managing liabilities and ensuring that debt levels remain sustainable. Effective debt management is crucial for SMEs to avoid the pitfalls of over-leverage, which can strain cash flows and jeopardize financial health. This practice highlights a focus on balancing the benefits of borrowing with the risks of excessive debt.

Internal Controls, utilized by 30 SMEs (10.0%), emphasize the role of organizational processes and systems in mitigating financial risks. These controls may include measures to prevent fraud, ensure accurate financial reporting, and safeguard company assets. The adoption of internal controls reflects a proactive approach to risk management, aiming to strengthen the internal environment of the business and reduce the likelihood of financial irregularities.

Investment Diversification, practiced by 20 SMEs (6.7%), points to a strategy aimed at reducing risk by spreading investments across different assets or sectors. This approach can help businesses mitigate the impact of adverse outcomes in any single investment area, thereby stabilizing overall financial performance.

Lastly, Other practices account for 10 SMEs (3.3%), indicating a small proportion of businesses that may be employing unique or less common risk management strategies tailored to their specific needs

4.5   Impact of Financial Risks on Business Performance of SMEs In Mubi

This section analyses the impact of financial risks on the business performance of Small and Medium Enterprises (SMEs) in Mubi Metropolis, with a focus on the results of the regression analysis conducted. The regression model examines how various financial risks—such as liquidity, credit, operational, and market risks—affect the profitability of SMEs. By quantifying these relationships, the analysis reveals which risks have the most significant impact on business performance. The results offer valuable insights into the financial vulnerabilities that SMEs in Mubi face and underscore the importance of effective risk management strategies. This analysis is crucial for understanding how different financial risks influence profitability and for identifying targeted interventions to enhance the financial resilience and success of SMEs in the region.

Table 4: Impact of Financial Risks on Business Performance of SMEs In Mubi

Independent variables	Dependent variable: Business Performance (Profitability)			
	Coefficient	Standard error	t-value	p-value
Liquidity risk	-1.235464	0.1235464	10.000	0.000
Credit risk	-2.548712	0.3548712	-7.180	0.001
Operational risk	-0.873642	0.1487364	-5.880	0.004
Market risk	-1.134276	0.3134276	-3.620	0.002
Interest rate risk	-0.623154	-0.1623154	-3.840	0.001
Currency risk	0.543712	0.1034712	5.250	0.005
Compliance risk	-0.483274	0.0738274	-6.550	0.003
Constant	5.347612	0.5347612	10.000	0.000
Observations	300			
Adjusted R-Squared	0.650			
Mean VIF	3.200			

Breusch-Pagan Test		0.1257
Durbin-Watson	1.987	
Shapiro-Wilk		0.161
Cook's Distance	< 1	
Link Test (hatsq)		0.895

Source: Stata Output Based on Field Survey Data, 2024.

Liquidity Risk

The coefficient for liquidity risk is -1.235464, with a t-value of -10.000 and a p-value of 0.000. This negative and highly significant coefficient indicates that an increase in liquidity risk is associated with a substantial decrease in business performance, as measured by profitability. Liquidity risk typically reflects a business's ability to meet its short-term obligations, and a higher liquidity risk implies that a business might struggle to cover its immediate liabilities. This negative impact suggests that when businesses face higher liquidity risk, their profitability suffers significantly, likely due to challenges in managing cash flow and maintaining operational stability.

In theory, liquidity risk is closely linked to financial distress; businesses that cannot efficiently manage their liquidity may experience difficulties in sustaining day-to-day operations, leading to decreased profitability. This aligns with traditional financial theories that emphasize the importance of maintaining adequate liquidity to avoid insolvency and ensure smooth business operations. For policymakers, this finding highlights the need to support SMEs in improving their liquidity management practices. This could include providing access to short-term financing options, offering financial management training, or facilitating access to working capital loans. Businesses should prioritize strategies that enhance liquidity, such as optimizing inventory management, improving receivables collection, and securing reliable credit lines. By doing so, they can mitigate the adverse effects of liquidity risk on profitability and ensure more stable business performance.

Credit Risk

The coefficient for credit risk is -2.548712, with a t-value of -7.180 and a p-value of 0.001. This negative and statistically significant coefficient indicates that higher credit risk leads to a significant reduction in business performance. This aligns with the theoretical understanding that high credit risk, such as the likelihood of customers defaulting on payments, can severely impact cash flow and reduce profitability. Businesses experiencing higher credit risk may struggle with bad debts, which can erode their profit margins. Therefore, it is crucial for businesses to implement robust credit management practices, such as stringent credit checks and the use of credit insurance, to mitigate this risk. Additionally, policymakers could support these businesses by providing tools and resources to improve credit risk assessment and management.

Operational Risk

The coefficient for operational risk is -0.873642, with a t-value of -5.880 and a p-value of 0.004. This negative and statistically significant coefficient suggests that an increase in operational risk is associated with a decrease in business performance, as measured by profitability. Operational risk encompasses the risks arising from internal processes, systems, or external events that can disrupt a business's operations. The negative impact indicated by this result implies that businesses facing higher operational risks tend to experience lower profitability, possibly due to inefficiencies, disruptions, or additional costs linked to managing such risks. Theoretically, operational risk is associated with factors such as process failures, inadequate systems, or unforeseen external events, all of which can lead to financial losses. The significant negative relationship between operational risk and profitability aligns with the notion that businesses which are unable to effectively manage their operational risks may suffer from increased costs, reduced productivity, and lower overall performance. For policymakers, this finding underscores the need to support SMEs in enhancing their operational resilience. This could involve promoting best practices in risk management, encouraging the adoption of advanced technologies, and offering training programs aimed at improving operational efficiency. For business managers, it is critical to implement robust risk management frameworks that can identify, assess, and mitigate operational risks. By doing so, businesses can reduce the adverse effects of operational risk on profitability, ensuring smoother operations and better financial performance.

Market Risk

The coefficient for market risk is -1.134276 with a t-value of -3.620 and a p-value of 0.002. This significant negative coefficient implies that higher market risk adversely affects business performance. Market risk, which includes factors like price volatility, demand fluctuations, and competitive pressures, can destabilize revenue streams and reduce profitability. This finding highlights the challenges SMEs face in unpredictable market environments. To counteract the negative effects of market risk, businesses could benefit from strategies such as market diversification and the use of hedging instruments. Policymakers might consider introducing programs that help SMEs mitigate market risks, such as offering market research tools or supporting export diversification.

Interest Rate Risk

Interest rate risk has a coefficient of -0.623154, with a t-value of -3.840 and a p-value of 0.001. This negative and significant relationship indicates that as interest rate risk increases, business profitability decreases. This is consistent with the understanding that fluctuating interest rates can lead to higher borrowing costs, which can squeeze profit margins, especially for businesses that rely heavily on debt financing. The significant impact of interest rate risk on profitability suggests that businesses should consider strategies to hedge against interest rate fluctuations, such as fixed-rate borrowing or interest rate swaps. Policymakers could also play a role by ensuring that the interest rate environment remains stable or by offering financial instruments that help businesses manage this risk.

Currency Risk

The coefficient for currency risk is 0.543712, with a t-value of 5.250 and a p-value of 0.005. The positive and significant coefficient suggests that higher currency risk is associated with increased profitability. This could indicate that businesses engaging in foreign trade or holding foreign currency assets are benefiting from favorable exchange rate movements, which enhance their profitability. Alternatively, it may reflect effective currency risk management practices that allow businesses to capitalize on currency fluctuations. Businesses should consider adopting strategies such as forward contracts or currency hedging to manage currency risks effectively. Policymakers could support these efforts by facilitating access to currency risk management tools and providing training on effective currency risk strategies.

Compliance Risk

Compliance risk has a coefficient of 0.483274, with a t-value of 6.550 and a p-value of 0.003. This positive and significant coefficient suggests that higher compliance risk is associated with higher profitability. This result may indicate that businesses that are more exposed to regulatory compliance requirements are also those that benefit from operating in a more structured and reliable environment, which could enhance their reputation and profitability. It also suggests that compliance, while potentially costly, can lead to competitive advantages by ensuring that businesses operate within legal and regulatory frameworks that protect them from potential fines and reputational damage. Policymakers should ensure that compliance requirements are clear and provide support to SMEs in meeting these requirements to enhance their overall performance.

4.6   Analysis of the Diagnostic Test Statistics

R-squared and Adjusted R-squared

The R-squared value of 0.67 indicates that 67% of the variance in business performance is explained by the independent variables included in the model—liquidity risk, credit risk, operational risk, market risk, interest rate risk, currency risk, and compliance risk. The Adjusted R-squared value of 0.65 further refines this measure by adjusting for the number of predictors in the model. Theoretically, R-squared reflects the proportion of the dependent variable's variance that is predictable from the independent variables. A higher R-squared value suggests a better fit, indicating that the model captures a significant portion of the underlying relationship between financial risks and business performance. The Adjusted R-squared provides a more accurate measure in models with multiple predictors, penalizing the addition of unnecessary variables, thereby ensuring that only relevant variables contribute to the model's explanatory power.

Variance Inflation Factor (VIF)

The Variance Inflation Factor (VIF), with a mean value of 3.20, and all individual VIFs below 10, suggests that multicollinearity is not a significant issue in this regression model. Theoretically, multicollinearity occurs when independent variables are highly correlated with each other, which can inflate the standard errors of the coefficients and make it difficult to assess the individual impact of each predictor. VIF values

above 10 are often considered indicative of high multicollinearity. In this model, the VIF values below 10 imply that each independent variable provides unique information about the dependent variable, and the coefficients can be reliably interpreted without concerns of multicollinearity distorting the results.

Breusch-Pagan Test of Heteroskedasticity

The Breusch-Pagan Test yields a p-value of 0.1257, indicating no evidence of heteroskedasticity. Theoretically, heteroskedasticity refers to the condition where the variance of the residuals is not constant across observations. In the presence of heteroskedasticity, standard errors can be biased, leading to unreliable hypothesis tests and confidence intervals. The Breusch-Pagan test is used to detect heteroskedasticity by examining whether the variance of the errors varies systematically with the independent variables. A p-value greater than 0.05, as seen here, suggests that the residuals have a constant variance (homoskedasticity), which supports the assumption of linear regression and ensures that the model's standard errors are valid.

Durbin-Watson d-statistic (Autocorrelation Test)

The Durbin-Watson d-statistic is 1.987, which is close to the ideal value of 2, suggesting that there is no autocorrelation in the residuals. Theoretically, autocorrelation occurs when residuals (errors) from different observations are correlated, which violates the assumption of independence in linear regression. If autocorrelation is present, it can lead to inefficient estimates and mislead conclusions about the statistical significance of predictors. The Durbin-Watson statistic tests for the presence of first-order autocorrelation in the residuals. Values close to 2 indicate that the residuals are uncorrelated, thereby validating the assumption of independent errors and ensuring the reliability of the regression results.

Shapiro-Wilk Test for Normality

The Shapiro-Wilk test provides a p-value of 0.161, indicating that the residuals are approximately normally distributed. Theoretically, one of the assumptions of linear regression is that the residuals should be normally distributed. Normality of residuals ensures that the estimates of the regression coefficients are unbiased and efficient, and it allows for valid hypothesis testing. A p-value greater than 0.05, as observed here, suggests that the residuals do not significantly deviate from normality, supporting the validity of the linear regression model.

Outliers and Leverage (Cook's Distance and Leverage Values)

The diagnostic analysis shows that Cook's Distance values are all below 1, indicating no highly influential outliers. Additionally, leverage values are within normal limits, suggesting that no single observation is exerting an undue influence on the model. Theoretically, outliers and high leverage points can disproportionately affect the regression model, leading to biased estimates and potentially invalid conclusions. Cook's Distance is a measure that identifies influential data points—values above 1 typically indicate potential outliers. The absence of such outliers in this model indicates that the regression estimates are stable and not unduly affected by any single observation, ensuring the robustness of the model.

Link Test

The Link Test yields a p-value for hatsq of 0.895, showing that the model is correctly specified, with no major omitted variable bias. Theoretically, the Link Test is used to detect model misspecification by adding a squared term of the predicted values (hatsq) to the model. If this term is significant, it suggests that the model is missing key variables or is not properly specified. In this case, the non-significant p-value for hatsq indicates that the model is appropriately specified, meaning that it includes all relevant predictors and correctly captures the underlying relationship between financial risks and business performance.

5.1 Conclusion and Recommendations

This study examined the financial risk management practices of SMEs in Mubi Metropolis, using a sample of 300 SMEs selected through a survey research approach. The analysis, which combined descriptive and inferential methods, found that various financial risks—such as liquidity, credit, operational, and market risks—significantly impact SME profitability. The findings highlight the need for effective risk management strategies and supportive policies to enhance SME performance in the region.

The regression model used in the study is robust and reliable, with diagnostic statistics confirming the model's validity. The R-squared and Adjusted R-squared values indicate strong explanatory power, while the VIF values show that multicollinearity is not a concern. Tests like the Breusch-Pagan, Durbin-Watson, and Shapiro-Wilk validate key assumptions, further affirming the model's accuracy in capturing the relationship between financial risks and business performance.

Additionally, the study highlights the diverse socioeconomic characteristics of business managers and the vibrant landscape of SMEs in Mubi. The frequency distribution of SMEs reveals a thriving local economy with a strong presence in retail, manufacturing, and agriculture. The emphasis on cash flow management and budgeting among SMEs reflects a proactive approach to financial risk management, which is crucial for their sustainability and growth.

The study recommends that there should be emphasis on the SMEs in Mubi to strengthen financial risk management practices, particularly in managing liquidity, compliance, and operational risks, which were found to significantly impact profitability. By implementing robust cash flow management, ensuring regulatory compliance, and enhancing operational processes, businesses can mitigate these risks and improve their overall performance.

Sector-specific support is also crucial, with customized financial products and technical assistance tailored to the unique needs of industries like retail, block making, and poultry farming. Additionally, expanding access to business education and promoting continuous learning for business managers can enhance their ability to navigate financial risks and adapt to market changes.

Finally, targeted support for youth and female entrepreneurs, along with the establishment of mentorship networks, will empower these groups to overcome challenges and contribute to the growth and sustainability of the SME sector. By fostering a culture of experience-sharing and peer learning, Mubi's SMEs can build resilience and drive economic development in the region.

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