Exploring The Influence of Kwacha Fluctuations on Medium Small and Micro Enterprises Mmsmes Profitability: A Case of Choma District Southern Zambia

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ABSTRACT

This study investigated the impact of kwacha fluctuations on the financial performance of Micro, Small and Medium Enterprises (MSMEs) in Choma District, Zambia, specifically on how demographic characteristics, sectoral distribution, and managerial strategies influence enterprise resilience to currency volatility. Using both descriptive and correlation analyses, the study found that MSME operators are mmostly male (59.6%) and the majority aged between 36 and 45 years, with most possessing only primary or secondary education. This demographic structure significantly constrains financial literacy and the capacity to apply sophisticated risk management tools such as hedging. The findings revealed that 98% of MSMEs are import-driven, making them acutely vulnerable to kwacha depreciation, which inflates procurement costs and erodes profitability. Retail and manufacturing sectors exhibited the highest exposure, showing large fluctuations in net profit margins (NPM) and profit growth rates (PGR), while service-oriented sectors such as education and finance displayed relative stability. The study further established that most MSMEs depend on informal coping mechanisms primarily inventory management and reactive pricing adjustments rather than formal financial instruments, due to limited financial literacy, weak supplier networks, and restricted access to capital markets.

Correlation analysis confirmed significant relationships between currency volatility, pricing strategies, import reliance, and profitability, as well as a positive association between education level, enterprise size, supplier relationships, and hedging adoption. The findings affirm theoretical perspectives from the Resource-Based View (RBV) and Purchasing Power Parity (PPP), emphasizing that internal capacity and market exposure determine enterprise resilience.

The study concludes that MSMEs in Choma District face systemic vulnerabilities to exchange rate instability due to import dependence, weak financial management practices, and limited macroeconomic awareness. It recommends targeted financial literacy programmes, improved access to hedging instruments, promotion of local value chains, and macroeconomic stability as crucial pathways for enhancing MSME resilience and sustainable growth in Zambia's volatile economic environment.

Keywords: MSMEs, exchange rate volatility, kwacha depreciation, financial performance, hedging, Zambia, Choma District

INTRODUCTION

Micro, Small, and Medium Enterprises (MMSMEs) are a cornerstone of Zambia's economic development, contributing substantially to employment creation, innovation, and inclusive growth. Despite their vital role, MMSMEs face numerous external and internal challenges that undermine their profitability and sustainability. Among these, exchange rate fluctuations particularly the volatility of the Zambian Kwacha represent a critical external factor affecting costs, revenues, and overall business performance.

Globally, several studies have explored the effects of currency fluctuations on business performance, a study by (Belghitar, et al., 2021) examined post-Brexit currency effects on MSMEs in the United Kingdom, while similar investigations have been undertaken within the European (European Union, 2015), and India

(Kahunde, et al., 2021), (Kahunde, et al., 2021). These studies predominantly emphasize macroeconomic outcomes and global trade dynamics, with limited focus on firm-level profitability within MMSMEs . Regionally, (Metumara, 2023) explored the impact of Naira volatility on SME profitability in Nigeria, while local investigations by (Kuntashula, 2020), (Nyirenda, 2020) and (Lungu & Kaubi, 2017) examined the effects of exchange rate fluctuations on trade and SME operations in Zambia. Additional work by (Chilufya & Mwewa, 2022) analyzed exchange rate volatility and SME performance, and (Chitambala, 2019) examined currency depreciation and economic growth. Despite these contributions, there remains a gap in understanding how Kwacha fluctuations specifically influence MSME profitability in Choma District a region characterized by high import dependency and a growing base of small enterprises operating on narrow profit margins. The current study seeks to address this knowledge gap.

The statement of the problem is that The Zambian Kwacha has experienced pronounced volatility in recent years (Sikabbwele, 2024), driven by inflationary pressures, shifts in economic policy, and fluctuations in global commodity prices (Kuntashula, 2020). Such instability introduces uncertainty for MSMEs, often resulting in rising input costs, inconsistent revenues, and challenges in maintaining competitive pricing (Nyirenda, 2020). Despite the centrality of MSMEs to Zambia's local economic development, little empirical evidence exists on how Kwacha fluctuations affect their profitability, particularly in Choma District, where import reliance amplifies exposure to currency risk.

This study aligns with several United Nations Sustainable Development Goals (SDGs) which includes: SDG 8 (Decent Work and Economic Growth); The study supports the promotion of sustained and inclusive economic growth by examining how currency stability can enhance MSME performance and employment generation; SDG 1 (No Poverty): By improving understanding of MSME profitability, the study contributes to poverty reduction through enhanced income stability and job creation; SDG 9 (Industry, Innovation, and Infrastructure): The findings provide insights into financial access and resilience among MSMEs operating in volatile environments. SDG 17 (Partnerships for the Goals): The study informs partnerships that mobilize financial and technical support for MSME development in Zambia.

The paper is organized as follows: Section One introduces the study; Section Two presents the literature review; Section Three outlines the theoretical and conceptual frameworks; Section Four discusses the research methodology; Sections Five and Six present the results and discussion, while Section Seven concludes and provides recommendations.

LITERATURE REVIEW

General Overview.

Exchange rate volatility significantly influences macroeconomic stability, trade performance, and business operations. Previous research by (Chilanga & Kunda, 2025) (Chilufya & Mwewa, 2022). has shown that exchange rate volatility is associated with asset price distortions, financial uncertainty, and credit risks. In Zambia, key macroeconomic fundamentals including inflation, interest rates, GDP growth, and balance of payments are the principal drivers of exchange rate movements. Broadly, currency instability affects both developing and developed economies by disrupting business activity and reducing competitiveness.

Impact of Exchange Rate Fluctuations on operational aspects of SME

Notably exchange rate fluctuations has a positive impact on Small and Medium-sized Enterprises (MSMEs), which are not only experienced in developing but also developed countries the major key areas of business that are normally impacted includes procurement, pricing strategies, and profit margins.

Impact on Procurement

In import-dependent economies like Zambia, currency depreciation raises the cost of imported goods and raw materials. Studies across sub-Saharan Africa show that MSMEs experience sharp increases in production costs, reduced import volumes, and disrupted production continuity during depreciation periods. Local evidence

confirms similar trends in Zambia, where rising import costs compress profit margins and destabilize operations., (Chitambala, 2019)

Effects on Pricing Strategies

Currency instability undermines MSMEs' ability to maintain consistent pricing. As a consequence, weak market power, most firms cannot fully pass on increased costs to consumers. Thus, they frequently adjust prices to remain competitive, although such dynamic pricing often reduces customer loyalty. A Regional study by (Kuntashula, 2020) indicate that firms resort to short-term contracts and ad-hoc pricing as a way of coping with mechanisms, which contributee to revenue unpredictability.

Impact on Profit Margin

Profitability is one of the most affected components of MSME performance. Rising input costs and pricing instability reduce margins and erode capital bases, discouraging reinvestment. Empirical evidence from Zambia and other African countries consistently shows a negative relationship between exchange rate volatility and MSME profitability, with increased operating costs restricting both growth and sustainability (Lakuma & Muhumuza, 2019), (Chilufya & Mwewa, 2022).

Sectoral Effects of Kwacha Fluctuations

The extent of impact varies by sector depending on the level of import dependency, export orientation, and access to foreign currency. Exchange rate depreciation can function as either a constraint or an opportunity.

Real Estate Sector

A depreciating Kwacha can attract foreign investors due to relatively cheaper property values. However, local developers face higher costs of imported building materials, narrowing profit margins despite increased foreign interest (Kuntashula, 2020).

Information and Communication Technology (ICT) Sector

Short-term depreciation may attract outsourcing contracts, but over time, increased import costs for hardware and software reduce profitability. Inflation erodes consumer purchasing power and makes long-term pricing difficult, creating revenue uncertainty (Lungu & Kaubi, 2017).

Manufacturing Sector

Manufacturing is highly exposed due to reliance on imported machinery and raw materials. Depreciation inflates production costs, reduces production volumes, and compresses margins. Although exporters may gain, most small manufacturers lack access to hedging and remain negatively affected (Lungu & Kaubi, 2017).

Agricultural Sector

For export-oriented crops, depreciation enhances international competitiveness. However, farmers dependent on imported fertilizers, pesticides, and equipment faces escalating costs. Smallholder farmers are particularly vulnerable due to limited credit access and inability to manage price volatility (Mwansa, 2020).

Retail and Wholesale Trade Sector

Retailers and wholesalers many of whom import from South Africa, China, and Tanzania (Common Market for Eastern and Southern Africa, 2020). Who face immediate cost increases during depreciation. Passing these costs to consumers reduces demand, while absorbing them leads to liquidity challenges. Profit margins in this sector are among the most volatile.

Tourism and Hospitality Sector

Depreciation can make Zambia a more affordable destination for international tourists. Nonetheless, higher costs of imported supplies and operational inputs reduce profitability. The net effect depends on whether tourism inflows outweigh increased operating expenses, (Africa Economic Outlook, 2021).

Mining and Energy Sector

Depreciation increases the local currency value of foreign-denominated revenues, temporarily boosting earnings. However, it simultaneously raises the cost of imported machinery, fuel, and spare parts. Prolonged volatility also complicates energy pricing and discourages new investment (Mbao, 2021).
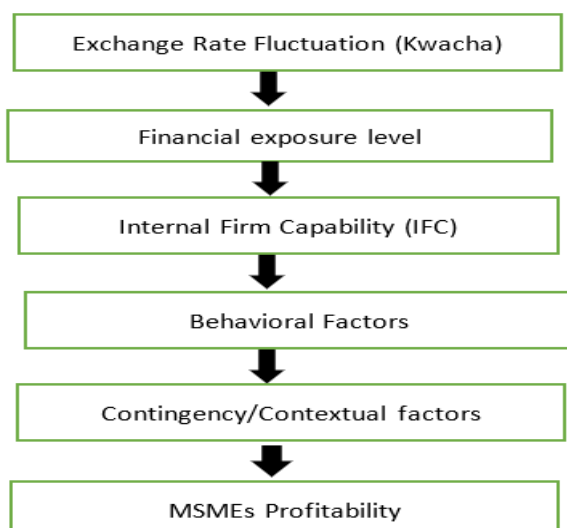
Education and Health Sectors

Though less trade-intensive, these sectors are affected through the rising cost of imported educational materials, laboratory equipment, and pharmaceuticals. Increased service fees reduce accessibility, particularly for lower-income households. Currency volatility also complicates tuition and operational planning for private institutions. (Hambayi, 2020).

CONCEPTUAL AND THEORETIC FRAMEWORK

Conceptual Framework

The conceptual framework of the study characterizes the comprehension of factors of kwacha fluctuation that influences profitability of MMSMEs , encompassed in the conceptual framework representation is: The Independent Variable (IV), which classically shows Kwacha Exchange Rate Fluctuations, Depreciation/Appreciation Volatility and Uncertainty and the Rate of fluctuation (Chigozie, 2021); Moderating Variables, which includes operations such as procurement, pricing, revenue; Internal Capabilities (RBV) which depicts intrinsic factors such as Financial management, skills, Use of hedging, risk mitigation and business diversification (Kuntashula, 2020); Behavioural Factors includes Risk perception; Overreaction or underreaction, Financial literacy and Herd behaviour Contextual/Contingency Factorsincludes; Business size Sector and market type (rural/urban); Dependent Variable (DV), includes MSME Profitability such as Net profit margin, Cash flow performance, Business growth or decline and Sustainability/continuity. Thus, the conceptual framework is important in the study because it enables the Identifcation of a cause-effect relationships, it characteristically explains the dissimilarity in impact across MSMEs , together with highlighting the role of firm-level responses and resilience, the framework can also be used to informs how to support MSMEs during macroeconomic shocks.

Source: Author 2025

THEORETIC FRAMEWORK

The study applied the following theories in exploring the influence of kwacha fluctuations on Medium Small and Micro enterprises MMSMES profitability.

Purchasing Power Parity Theory

The Purchasing Power Parity (PPP) was developed by Gustav Cassel a Swedish economist in the aftermath of World War I (Cassel, 1918). It is thus an economic theory that establishes that exchange rates between currencies should adjust to ensure that identical goods cost the same in different countries when priced in a common currency (Dornbusch, 1987), (Dornbusch, 1987). The theory is important to the current study, because kwacha fluctuations has an impact on input costs, where numerous MSMEs in Zambia depend on imported raw materials, equipment, or finished goods, thus if the Kwacha depreciates, the cost of these imports increases, reducing the purchasing power of the Kwacha, and thereby increasing business expenses, the common notion with this theory is that a Kwacha leads to comparatively higher prices for imported goods, which increase prices, consequently affecting customer demand and reduce competitiveness.

Transaction Exposure Theory

The transactional exposure theory was discoursed by Lawrence (1976) (Lawrence, 1976), It was however expanded by modern financial scholars Madura (2008) and Shapiro (2006) (Madura, 2008), (Shapiro, 2006). The theory contends that companies are exposed to exchange rate movements, in events where they commit to future foreign-currency denominated transactions as a consequence when the domestic currency depreciates, importers pay more, and exporters receive more in local currency therefore affecting profitability (Madura, 2008). The theory is important to the present study because most Zambian MSMEs import raw materials, goods, or services, which are quoted and priced in foreign currencies, as a result the depreciation in the Zambian Kwacha (ZMW) has a likelihood of increasing local cost of these transactions, thus squeezing profit margins, additional Most MSMEs in Zambia do not hedge against foreign exchange risks, perhaps because of limited financial literacy or lack of access to financial instruments, as a consequence this makes them highly susceptible to transaction exposure.

Resource Based Theory

The resource based theory traces its roots from Birger Wernerfelt, who introduced the term Resource-Based View (Wernerfelt, 1984), Jay Barney further ddeveloped the VRIN framework (Barney, 1991), further Edith Penrose added the Theory of the Growth of the Firm (Peteraf, 1993). The theory stresses that a firm's capability to attain and sustain competitive advantage lies principally in the internal resources it holds as opposed to external market positioning. The theory shifts emphasis from external exchange rate shocks to internal strategic capacityy. The theory is applicable in the present study because the fluctuations of the kwacha is an external shocks, thus MSMEs with strong internal capabilities such as financial acumen, supplier networks, inventory control systems are better equipped to adapt and remain profitable, additionally MSMEs that have currency risk management skills, access to forex accounts, or diversified supply chains may uphold stable profit margins in spite of exchange rate changes, it is also important because it shows the importance of financial literacy to MMSMEs , because those MMSMEs who understand how to fine-tune pricing, source locally, or hedge currency risk are more likely to survive Kwacha depreciation.

RESEARCH METHODS

Research Design

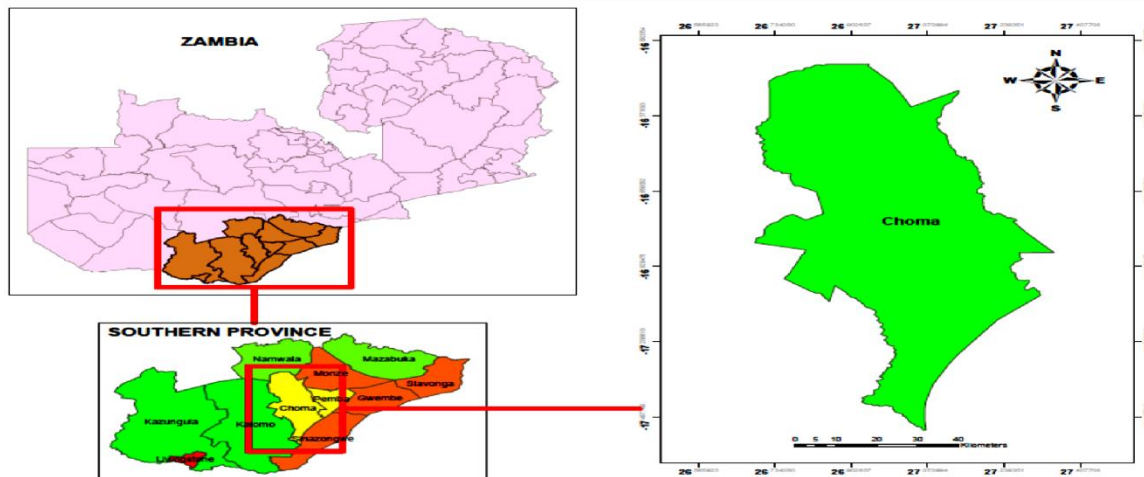This study adopted a mixed-method research design that incorporated both quantitative and qualitative approaches. Quantitative data were gathered through structured questionnaires to measure the relationship between Kwacha exchange rate fluctuations and MSME profitability. Additionally, qualitative data were collected using semi-structured interviews to gain deeper insights into business owners' perceptions and lived

experiences regarding currency volatility. This design provided both statistical reliability and contextual understanding, thereby enriching the analysis of how exchange rate movements influence MSME performance.

Study Area

The study was conducted in Choma District, which lies between longitudes 26°30′ and 27°30′ East of Greenwich, and latitudes 16° and 17°45′ South of the equator, situated on the plateau of Zambia's Southern Province. Choma serves as the provincial capital and a commercial hub, hosting a diverse range of MMSMEs engaged in retail, agro-processing, hospitality, manufacturing, and service delivery. The district has experienced notable economic fluctuations linked to currency volatility, making it a suitable site for examining the effects of Kwacha exchange rate movements on MSME performance

Source: (Choma Municipal Council, 2021)

Target Population

The target population comprised Micro, Small, and Medium Enterprises (MMSMEs) operating in Choma District. These included both formal and informal businesses across various sectors such as agriculture, retail, services, and manufacturing. The primary respondents were business owners, managers, and financial officers, as they possess relevant knowledge and experience regarding business operations and financial management.

Sampling Techniques

To ensure inclusivity the study used three distinct sampling techniques, which are Stratified sampling, which was applied to ensure representation across the three enterprise categories which are micro, small, and medium, Purposive sampling this was used in the selection of key informants such as experienced business owners, officials or financial officers, and Simple random sampling, within each stratum to reduce prejudice (Nanjundeswaraswamy & Divakar, 2021).

Sample Size Calculation

The Cochran's Formula was used to determine the appropriate sample size, as the total number of MMSMEs in Choma was unknown and potentially large. The formula is expressed as:

$$n_0 = \frac{z_x^2 p_x q}{(e^2)}$$

Where:
n_0 = sample size
Z = standard normal deviation corresponding to a 95% confidence level (1.96)
p = estimated proportion of the population with the attribute (0.4)
q = 1 - p = 0.6

e = desired level of precision (0.04)

Calculation:

Numerator = $3.8416 \times 0.24 = 0.921984$

Denominator = $e^2 = 0.0016$

Therefore, $n_0 = 0.921984 / 0.0016 = 576$

Thus, the target sample size was 576 participants. However, 297 respondents successfully participated, representing a 52% response rate.

Data collection Instruments

Primary data were collected using structured physical questionnaires administered to MSME owners and finance managers. The questionnaires focused on exchange rate awareness, cost structures, sales trends, sourcing of inputs, and perceived impacts on profitability. Qualitative data were collected through semi-structured interviews with purposively selected business owners to gain deeper explanatory insights into how exchange rate fluctuations influence business operations.

Validity and Reliability Test

A pilot test involving 20–40 MSME respondents was conducted to assess the clarity, consistency, and comprehensibility of the questionnaire. Triangulation methods in accessing questionnaires, interviews, and secondary documents enhanced validity.

Reliability was assessed using Cronbach's Alpha in SPSS version 26, yielding a coefficient of 0.527 with an average inter-item covariance of 0.252. Although this value reflects low internal reliability, it was considered sufficient for exploratory research. The low alpha may be attributed to the small number of items measuring certain constructs, weak inter-item correlations, or heterogeneity in respondents' interpretations. Future studies may improve reliability by refining or expanding the scale items.

Data Analysis

Quantitative data were analyzed using SPSS Version 21. Descriptive statistics—means, standard deviations, frequencies, and percentages were used to summarize the dataset. Inferential statistics, particularly correlation analysis, were employed to examine the relationships between exchange rate fluctuations and MSME profitability. Trends in currency movements were also analyzed using Microsoft Excel to visualize sector-specific effects.

To integrate qualitative and quantitative evidence, a convergent mixed-methods design was adopted. Qualitative data from interviews were transcribed, coded, and organized into thematic categories that captured participants' perceptions, coping mechanisms, and experiences with exchange rate volatility. These emergent themes were subsequently compared with the quantitative results to explain, validate, or contextualize the observed statistical patterns.

PRESENTATION OF FINDINGS.

Demographic Characteristics of Participants

The study sought to describe the demographic characteristics of participating Micro, Small and Medium Enterprise (MSME) operators. Table 1 presents the background information of respondents, including age, gender, marital status, and education level.

The results indicate that the majority of respondents were aged between 36 and 45 years (36.4%, n=108), followed by those aged 26–35 years (25.3%, n=75) and 46–55 years (23.2%, n=69). Only 4% (n=12) were below 25 years, while 11.1% (n=33) were above 56 years. This suggests that most MSME owners and managers fall within the economically active age group, characterized by entrepreneurial experience and managerial maturity (Chirwa & Odhiambo, 2017)

Gender distribution shows that 59.6% (n=177) of respondents were male, whereas 40.4% (n=120) were female, indicating a gender imbalance in MSME ownership within the study area. Similar trends have been reported in other studies, which attribute this disparity to unequal access to start-up capital and sociocultural norms that limit women's participation in entrepreneurship (World Bank, 2022). (World Development Report, 2022).

Marital status analysis revealed that the majority of respondents were married (65.7%, n=131), followed by single (18.9%, n=37), widowed (7.5%, n=15), and divorced (6.0%, n=12), while (2.5%, n=5) were separated. Regarding education, most respondents had attained primary education (41.3%, n=83), followed by senior secondary school (33.8%, n=68), and certificate or diploma qualifications (12.6%, n=26). A small proportion reported no formal education (8%, n=16), while only (0.5%(n=1) possessed an undergraduate degree.

These results imply that the majority of MSME operators have modest educational backgrounds, which may constrain their financial literacy and management capabilities. This observation is consistent with findings by Banda and Phiri (2020), who argue that educational attainment plays a pivotal role in effective business recordkeeping and financial decision-making.

Table 1 Demograhic Chareterlistics

	F(n)	%
AGE		
<25	12	4
26 – 35	75	25.3
36- 45	108	36.4
46-55	69	23.2
56+	33	11.1
GENDER		
Male	177	59.6
Female	120	40.4
MARITAL STATUS		
Single	37	18.9
Married	131	65.7
Divorced	12	6.0
Widowed	15	7.5
Separated	05	2.5
LEVEL OF EDUCATION		
No Education Level	16	8.0

Primary Education	83	41.3
Senior Secondary School	68	33.8
Certificate/Diploma	26	12.6
Degree	01	0.5

Business Dynamics of MSMEs

Table 2 presents the distribution of MSMEs by sector, size, operational focus, and trade orientation. The majority of MSMEs operate within the retail sector (32.7%, n=96), followed by food processing (21.4%, n=63), technology services (11.1%, n=33), and liquor business (9.2%, n=27). Other sectors include manufacturing (5.1%, n=15), healthcare products and services (5.1%, n=15), motor vehicle services (6.1%, n=18), education (3.1%, n=9), financial services (2.0%, n=6), hospitality (2.0%, n=6), Agro-business (2.0%, n=6), and music and culture (1.0%, n=3).

In terms of size, macro enterprises accounted for 40.4% (n=120), medium enterprises for 37.4% (n=111), and established small businesses for 22.2% (n=66). This distribution reflects a vibrant yet unevenly structured MSME landscape, where most enterprises remain in the growth or stabilization phase, who are the most impacted by currency fluctuation.

The results further show that 98% (n=291) of the businesses are import-driven, while only 2% (n=6) are export-oriented, this directly indicates that most MSMEs have high dependence on foreign-sourced materials and finished goods. Congruently, 72.7% (n=216) reported importing raw or finished products, while 27.3% (n=81) did not. The dominance of import-driven enterprises suggests that currency volatility affects procurement and pricing decisions (Bank of Zambia, 2021).

Furthermore, 89.9% (n=267) of respondents transact primarily in Zambian Kwacha, while 10.1% (n=30) use multiple currencies. Most MSMEs (96%, n=285) engage in domestic trade, while only 4% (n=12) operate internationally. This limited exposure to export markets reflects both the structural and institutional challenges faced by MSMEs in integrating into global value chains (International Trade Center, 2022).

Table 2 Business Dynamics

BUSINESS DYNAMICS		
	N	**%**
BUSINESS TYPE		
Manufacturing	15	5.1
Technology Service	33	11.1
Food Processing	63	21.4
Retailing	96	32.7
Education	9	3.1
Financial Services	6	2.0
Health Care Products and services	15	5.1

Music and Culture	3	1.0
Liquor Business	27	9.2
Motor Vehicle service	18	6.1
Hospitality	6	2.0
Agro-Business	6	2.0
BUSINESS SIZE		
Macro	120	40.4
Medium	111	37.4
Established	66	22.2
CORE BUSINESS		
Import Driven	291	98.0
Export Driven	6	2.0
CURRENCY		
Kwacha	267	89.9
Various Currencies	30	10.1
IMPORTATION OF GOODS/MATERIALS		
Yes	216	72.7
No	81	27.3
Type of Trade		
Domestic	285	96.0
International	12	4.0
TOTAL	**297**	

Financial Management and the Effects of Currency Fluctuations

Table 3 presents findings related to financial reporting practices and the perceived impact of currency fluctuation on MSME performance. The results reveal that most MSMEs do not prepare formal financial statements (M = 3.35; Mode = 4), this shows that there is massive lack of compliance with basic accounting standards. In the same way, the majority do not report currency losses (M = 3.09; Mode = 4), highlighting weak financial control systems and limited risk monitoring practices, which may directly impact business profitability.

On the other hand, the results indicate that currency fluctuations significantly increase procurement costs (M = 2.12; Mode = 2), thereby constraining profitability. Moreover, macroeconomic factors particularly inflation and exchange rate variability were found to influence MSME profitability (M = 2; Mode = 1). The findings further demonstrate that exchange rate fluctuations have pronounced effects on pricing strategies (M = 2.08; Mode = 2) and profit margins (M = 1.53; Mode = 1), affecting both short-term and long-term performance (M = 1.77; Mode = 1).

These findings align with previous research emphasizing that exchange rate instability in developing economies increases business uncertainty, reduces purchasing power, and undermines enterprise competitiveness (Belghitar, et al., 2021), (Chitambala, 2019), (Mwansa, 2020) and (World Development Report, 2022).

Table 3: Financial Management and Effects to currency fluctuations

Variable	Median statistic	Mode Statistics	Mean Statistic	Remarks
Preparation of Financial statements	3.35	4	4	The median, mode and mean "DISAGREES" That most MMSMEs do not prepare financial statements.
Reporting of Currency Losses	3.09	4	4	The median, mode mean and standard deviation "Disagree". That MMSMEs do not report Currency losses.
Increase on Procurement Costs of goods and Services	2.12	2.00	2.00	The median, mode and standard "AGREES" that Kwacha Fluctuation spikes procurement costs of goods and services.
Macroeconomic Factors influence profitability	2	1	2	The median, and mean "AGREES" that Macro Economic factors influence profitability of MSMEs
fluctuation influence pricing strategies	2.08	1	2.00	The median, mean and mode Suggests that fluctuation of the Kwacha has an influence on pricing strategies.
exchange rate fluctuation impacts profit margins	1.53	1	1	The median, mean and mode Suggests that fluctuation of the Kwacha has an impact on profit margins.
Rate volatility affect your short-term and long-term profitability	1.77	2	1	The median, mean and mode Suggests that kwacha fluctuation impacts short-term and long-term profitability

Procurement and Financial Adjustment Strategies

Table 4 relates to finding on procurement and financial adjustment strategies it was found that to mitigate exchange rate risks, MSMEs employ various procurement adjustment strategies. The findings indicate that inventory management is the most common adjustment mechanism (M = 2.00; Mode = 1), while strategies such as supplier relationship management (M = 3.59; Mode = 4) and hedging (M = 3.59; Mode = 4) are less

commonly practiced. This preference suggests that MSMEs rely more on operational flexibility than on complex financial instruments to manage currency risks

Table 4: Procument and Financial Adjustment strategies

Variable	Median statistic	Mode Statistics	Mean Statistic	Remarks
Supplier relationships	3.59	4	4	The median, mode and mean "DISAGREES" That they do not adjust their procurement procedure through supplier relationship.
Heding	3.59	4	4	The median, mode mean "Disagree". That MMSMEs adjust their procurement strategies through Hedging.
Inventory management	2	2.00	1	The median, mode and standard "AGREES" most MMSMEs adjust their procurement strategies through inventory management

Financial Strategies

Table 5 relates to finding of financial strategies that most MMSMEs implement, the findings reveal most MSMEs do not use hedging instruments (M = 3.59; Mode = 4) or foreign accounts and derivatives (M = 4; Mode = 4). These findings mirror those of (Lungu & Kaubi, 2017) and (Chitambala, 2019) who observed that the adoption of formal financial risk management mechanisms among MSMEs remains low due to limited financial literacy, lack of access to derivative markets, and high transaction costs.

Table 5: Financial Strategies

Variable	Median statistic	Mode Statistics	Mean Statistic	Remarks
Heding	3.59	3.52	4	The median, mean suggest that most MMSMEs do not either use hedging as a financial strategy ".
Foreign accounts and derivatives	4	4	3.62	The median, mode and standard "DISAGREES" most MMSMEs most MMSMES do not use foreign accounts derivatives as a financial strategy

Sectoral Trends

The dataset captured in table 8 shows financial performance indicators for MSMEs across different sectors which includes: Manufacturing; Technology Services; Food Processing; Retailing; Education, Financial Services;Workshop; Health Care; Music and Culture;Liquor Businesss;, Motor Vehicle Service, and Hospitality, highlighting major key variables such as Gross Profit Margin (GPM), Net Profit Margin (NPM), Operating Profit Margin (OPM), Return on Assets (ROA), and Profit Growth Rate (PGR), which all aided in showing how kwacha variation (currency instability) has affected SME performance, The findings were presented according to sector by sector.

Manufacturing sector shows that the Average GPM is High (50–90%), the Average NPM is Very volatile, which ranged from + 60% to - 100% respectively, the ROA: is generally positive but inconsistent which range (–17% to 90%).

Technology Services sector it has been revealed that Average GPM lies 60–80% NPM shows Mostly 20–50%, with a few negative outliers. The ROA is Positive in most cases (20–130%), indicating efficient asset utilization, while the PGR reveals Mixed results with several negative growth rates.

The Food Processing sector reveals that the GPM Ranges widely (30–95%), while the NPM vary Often between 20–60%, with outliers below zero, The ROA is Mostly positive, irregularly above 100%, while the PGR is Highly inconsistent (–100% to +300%).

The Retailing sector reveals a GPM of 40–80%, with NPM which has revealed a Frequency of 20–60%, despite of some business recording losses, the ROA is Very high in several cases which reveals (>200%), indicative of rapid turnover. On the other hand, the PGR is Wide spread (–90% to +1400%), showing volatility.

The Education and Financial Services recorded a GPM of 100% because there are no COGS, whereas the NPM varies Between 20–80%. The ROA is Very high (up to 800%), which can be attributed to low asset intensity, on the other hand the PGR Fluctuated based on fee collection cycles or loan repayment trends.

Finally, Workshops, Motor Services, and Hospitality recorded a GPM which is High (70–95%), an NPM which varied between 30–80%. ROA Often where high (>200%), indicating fast asset turnover, The PGR on the other hand was generally negative, suggesting profitability declined despite strong margins.

The cross sectoral trends can be summarized table 6

Table 6: cross sectoral trends

Indicator	Observation	Implication
Gross Profit Margin (GPM)	Generally strong across MSMEs (50–90%)	Indicates robust revenue generation before accounting for costs.
Net Profit Margin (NPM)	Highly volatile; negative in many cases	Currency instability increases costs, reducing profitability.
ROA	Positive but inconsistent; some sectors show extreme values	Efficiency varies widely; MSMEs with better cost control fare better.
PGR (Profit Growth Rate)	Extreme variation (–100% to +1400%)	Kwacha fluctuations directly disrupt growth stability.

The finding suggests that Kwacha variation exerts a dual effect on MSMEs , where Negative impact Import-dependent MSMEs (manufacturing, retail, hospitality) suffer from increased input costs, reduced margins, and erratic growth, and Positive/neutral impact where Service-oriented and locally sourcing MSMEs (education, finance, workshops) exhibited stronger margins and resilience to currency shocks.

Table 7 Key for Sectoral Trend Table

Code	Variable
NP	Net Profit
PP	Present Profit
CP	Current Profit
GP	Gross Profit
GPM	Gross Profit Margin (%)

NPM	Net Profit Margin (%)
OP	Operating Profit
OPM	Operating Profit Margin (%)
ROA	Return on Assets (%)
PGR	Profit Growth Rate (or Performance Growth Rate)

Table 8: Sectoral Trend Table

BUSINESS TYPE	NP	PP	CP	GP	GPM	NPM	OP	OPM	ROA	PGR
Manufacturing	345000	184600	175,244	425000	75.8929	61.6071	345000	61.607	57.5	-5.07
Manufacturing	100200	67890	99878	198655	56.7586	28.6286	100200	28.629	42.64	47.12
Manufacturing	71826	45670	66870	197615	49.1739	17.8729	71826	17.873	46.05	46.42
Manufacturing	40955	120000	989567	940000	47	2.04775	40955	2.0478	0.819	724.6
Manufacturing	56556	567859	23400	94056	60.5695	36.4205	56556	36.421	87.59	-95.9
Manufacturing	29868	41780	33216	59546	56.5898	28.3852	29868	28.385	11.63	-20.5
Manufacturing	129800	86251	26400	257780	96.2261	48.4527	129800	48.453	66.56	-69.4
Manufacturing	-4913	28900	30500	218221	93.0497	-2.0949	-4913	-2.095	-4.81	5.536
Manufacturing	150200	95678	231456	239100	92.7139	58.2419	150200	58.242	75.05	141.9
Manufacturing	1985	34678	28700	37111	29.792	1.59352	1985	1.5935	0.296	-17.2
Manufacturing	-145903	29500	44560	75553	62.3256	-120.36	-145903	-120.4	-17.2	51.05
Manufacturing	41034	123600	21570	77898	79.4878	41.8714	41034	41.871	90.73	-82.5
Manufacturing	154010	23490	12220	176110	79.4075	69.4427	154010	69.443	62.71	-48
Manufacturing	-238890	23310	21650	-12190	-36.3881	-713.1	-238890	-713.1	-52.2	-7.12
Manufacturing	-265190	145600	225670	-11190	-4.77002	-113.04	-265190	-113	-757	54.99
Manufacturing	-41586	78960	22789	124203	35.9311	-12.031	-41586	-12.03	-33	-71.1
Technology Service	25110	24500	19660	52000	68.4211	33.0395	25110	33.039	45.32	-19.8
Technology Service	36790	35780	22690	53580	59.8258	41.0786	36790	41.079	66.89	-36.6
Technology Service	36890	24560	34780	92780	87.8016	34.9106	36890	34.911	102.5	41.61
Technology Service	18770	22450	35180	48550	60.6875	23.4625	18770	23.463	18.77	56.7
Technology Service	43220	87950	45670	66110	57.0455	37.294	43220	37.294	64.51	-48.1
Technology Service	115685	75690	66980	155535	60.5454	45.0329	115685	45.033	74.2	-11.5

Technology Service	29230	22500	35980	42120	62.8844	43.6399	29230	43.64	48.88	59.91
Technology Service	53540	82500	34560	80320	63.746	42.4921	53540	42.492	155.2	-58.1
Technology Service	25820	35690	26780	53710	71.045	34.1534	25820	34.153	24.52	-25
Technology Service	-3000	13500	17890	32890	31.0928	-2.8361	-3000	-2.836	-25	32.52
Technology Service	25360	17690	25670	44810	66.2968	37.5203	25360	37.52	201.3	45.11
Technology Service	50712	45100	28100	102401	80.0696	39.6528	50712	39.653	33.79	-37.7
Technology Service	27655	21780	22190	49665	30.6991	17.0942	27655	17.094	27.52	1.882
Technology Service	56342	101267	89760	122131	68.2677	31.4936	56342	31.494	2.809	-11.4
Technology Service	89300	78960	29340	179060	58.5623	29.2059	89300	29.206	133.5	-62.8
Technology Service	16234	15680	14570	26884	75.116	45.359	16234	45.359	64.45	-7.08
Technology Service	6021	25790	21890	81910	54.281	3.99006	6021	3.9901	20.22	-15.1
Technology Service	7250	21220	25900	41030	63.5238	11.2246	7250	11.225	15.83	22.05
Technology Service	680430	450000	779819	736110	94.1582	87.036	680430	87.036	136.1	73.29
Technology Service	3110	29800	15980	25890	56.6893	6.80972	3110	6.8097	7.974	-46.4
Technology Service	29980	69800	78240	58880	46.8529	23.8561	29980	23.856	5.996	12.09
Technology Service	12070	13960	18900	26770	58.6162	26.4287	12070	26.429	63.53	35.39
Technology Service	22100	18000	19890	39990	58.8175	32.5048	22100	32.505	96.55	10.5
Technology Service	6620	22780	14560	33400	81.068	16.068	6620	16.068	51.8	-36.1
Technology Service	2810	15690	16100	13020	65.7576	14.1919	2810	14.192	10.08	2.613
Technology Service	5200	22900	15600	32100	18.0337	2.92135	5200	2.9213	19.48	-31.9
Technology Service	68410	78000	198000	98210	78.568	54.728	68410	54.728	19.51	153.8
Technology Service	28544	22900	10900	44244	66.3328	42.7946	28544	42.795	106.9	-52.4
Technology Service	13110	18900	20600	28000	49.3218	23.0932	13110	23.093	84.04	8.995
Technology Service	80940	86700	22560	96610	76.9188	64.4427	80940	64.443	40.47	-74
Technology Service	-96400	19800	21600	71400	42.7545	-57.725	-96400	-57.72	-54.2	9.091
Technology Service	172690	66800	59980	195670	64.0135	56.4956	172690	56.496	38.38	-10.2
Technology Service	31960	260000	12356	133250	86.1345	20.6593	31960	20.659	15.15	-95.2
Technology Service	54600	20500	21500	69100	72.0542	56.9343	54600	56.934	47.48	4.878
Food Processing	2100	15600	10500	4900	21.7778	9.33333	2100	9.3333	67.74	-32.7
Food Processing	6200	15800	17800	20300	44.2266	13.5076	6200	13.508	59.05	12.66
Food Processing	6900	6700	4800	14700	49.6622	23.3108	6900	23.311	65.09	-28.4

Food Processing	2000	2300	1400	5700	54.2857	19.0476	2000	19.048	66.67	-39.1
Food Processing	9700	2500	6800	11200	58.9474	51.0526	9700	51.053	312.9	172
Food Processing	166800	255000	125600	205700	57.7971	46.8671	166800	46.867	33.36	-50.7
Food Processing	66100	125800	22190	79600	47.1844	39.182	66100	39.182	33.05	-82.4
Food Processing	94800	20600	40800	117400	46.96	37.92	94800	37.92	82.65	98.06
Food Processing	12300	15900	10600	22800	63.8655	34.4538	12300	34.454	58.57	-33.3
Food Processing	30900	11280	14000	45500	67.1091	45.5752	30900	45.575	283.5	24.11
Food Processing	60100	12190	50199	100100	82.2514	49.3837	60100	49.384	30.05	311.8
Food Processing	76200	20000	21300	94000	81.3149	65.917	76200	65.917	38.29	6.5
Food Processing	83092	91000	63400	129000	51.4765	33.1572	83092	33.157	68.33	-30.3
Food Processing	73300	22600	19600	130000	82.9611	46.7773	73300	46.777	94.22	-13.3
Food Processing	50500	45600	60100	106100	51.58	24.5503	50500	24.55	16.83	31.8
Food Processing	122742	22100	86000	201642	93.0512	56.6414	122742	56.641	24.55	289.1
Food Processing	-40255	80000	76900	74645	24.8448	-13.398	-40255	-13.4	-6.71	-3.88
Food Processing	1294400	750000	1259000	1500000	30	25.888	1294400	25.888	18.49	67.87
Food Processing	382200	450000	766900	536100	95.9034	68.3721	382200	68.372	63.7	70.42
Food Processing	54320	250900	140600	110120	32.8129	16.1859	54320	16.186	7.884	-44
Food Processing	435199	225100	145780	550099	70.8983	56.0896	435199	56.09	435.2	-35.2
Food Processing	10300	6000	7000	18100	80.0885	45.5752	10300	45.575	153.7	16.67
Food Processing	16671	30000	36000	50471	50.1351	16.56	16671	16.56	13.89	20
Food Processing	14900	16000	14000	19400	84.7162	65.0655	14900	65.066	115.5	-12.5
Food Processing	26539	22900	4899	44439	66.5364	39.7356	26539	39.736	74.55	-78.6
Food Processing	4510	5000	4500	19110	53.2312	12.5627	4510	12.563	57.82	-10
Food Processing	406800	250000	450000	565800	84.726	60.9164	406800	60.916	45.2	80
Food Processing	-2200	22900	0	37000	41.7607	-2.4831	-2200	-2.483	-1.47	-100
Food Processing	76500	30000	45000	99000	62.6979	48.4484	76500	48.448	38.25	50
Food Processing	8500	28000	10000	16500	74.6606	38.4615	8500	38.462	170	-64.3
Food Processing	1599000	1600000	1600000	3389000	59.6865	28.1613	1599000	28.161	159.9	0
Food Processing	0	16000	22000	44600	66.8666	0	0	0	0	37.5
Food Processing	244701	200000	255000	422701	94.8611	54.9149	244701	54.915	48.94	27.5
Food Processing	31100	18900	18900	47800	71.6642	46.6267	31100	46.627	111.1	0

Food Processing	90800	12100	200000	190800	85.0267	40.4635	90800	40.463	30.27	1553
Food Processing	24700	168000	7800	37300	59.3005	39.2687	24700	39.269	54.89	-95.4
Food Processing	9300	14600	17900	153900	86.9492	5.25424	9300	5.2542	4.047	22.6
Food Processing	56300	30000	45600	111900	55.95	28.15	56300	28.15	16.09	52
Food Processing	18330	129000	113200	32930	53.1729	29.5979	18330	29.598	14.66	-12.2
Food Processing	-106800	14600	17600	37900	56.745	-159.9	-106800	-159.9	-534	20.55
Food Processing	-14000	14400	22100	-7500	-6.60211	-12.324	-14000	-12.32	-7	53.47
Food Processing	50090	49000	45000	120090	60.018	25.0337	50090	25.034	74.87	-8.16
Food Processing	639100	78000	80000	651500	97.6762	95.8171	639100	95.817	127.8	2.564
Food Processing	683990	89900	89000	762100	96.5906	86.6907	683990	86.691	684	-1
Food Processing	588900	78000	77311	744400	82.8031	65.5061	588900	65.506	560.9	-0.88
Food Processing	20000	89900	10600	37000	36.0273	19.4742	20000	19.474	13.33	-88.2
Food Processing	101810	10100	55800	119700	61.4792	52.2907	101810	52.291	95.33	452.5
Food Processing	199100	100600	150000	366100	65.8453	35.8094	199100	35.809	33.18	49.11
Food Processing	546100	121000	200000	681100	89.6184	71.8553	546100	71.855	94.94	65.29
Food Processing	106000	35000	45000	151000	88.3041	61.9883	106000	61.988	82.17	28.57
Food Processing	260390	22780	144000	283790	80.9695	74.2931	260390	74.293	391.6	532.1
Food Processing	35300	66500	25800	45800	68.5629	52.8443	35300	52.844	186.8	-61.2
Food Processing	75700	180000	228999	131700	80.3539	46.1867	75700	46.187	75.7	27.22
Food Processing	125211	174000	189000	143961	86.4735	75.2108	125211	75.211	62.61	8.621
Food Processing	32900	22800	10500	100900	82.7728	26.9893	32900	26.989	26.17	-53.9
Food Processing	194500	88900	102300	214400	32	29.0299	194500	29.03	19.45	15.07
Food Processing	1281400	166800	225700	1511000	59.4882	50.4488	1281400	50.449	320.4	35.31
Food Processing	6330500	225100	300000	6552100	98.1147	94.7963	6330500	94.796	5510	33.27
Food Processing	610000	125000	141600	1399000	86.4114	37.6776	610000	37.678	10.76	13.28
Food Processing	2975820	224800	115000	3275820	93.5681	84.9991	2975820	84.999	1807	-48.8
Food Processing	94580	161200	132900	138890	86.16	58.6725	94580	58.672	11.26	-17.6
Food Processing	131000	221700	21100	117700	34.5364	38.439	-13300	-3.903	69.09	-90.5
Food Processing	433200	223000	144800	466400	67.5942	62.7826	433200	62.783	228.1	-35.1
Food Processing	320100	115100	20705	541800	81.1321	47.9335	320100	47.934	278.6	-82

Retailing	57000	221900	400000	156000	43.9437	16.0563	57000	16.056	34.55	80.26
Retailing	46500	20000	200000	68700	40.7232	27.5637	46500	27.564	39.81	900
Retailing	130800	212900	40100	149500	56.3938	49.3399	130800	49.34	114	-81.2
Retailing	91630	11400	221900	101600	53.5865	48.3281	91630	48.328	407.2	1846
Retailing	10689	14490	22700	27589	23.641	9.15938	10689	9.1594	13.7	56.66
Retailing	75500	20000	20000	98000	59.3939	45.7576	75500	45.758	50.33	0
Retailing	32700	212300	22600	96800	81.413	27.5021	32700	27.502	113.1	-89.4
Retailing	70900	22100	33100	95000	43.8394	32.718	70900	32.718	59.63	49.77
Retailing	126450	15680	22780	142050	86.0909	76.6364	126450	76.636	508	45.28
Retailing	40000	22900	121000	73000	39.5236	21.6567	40000	21.657	47	428.4
Retailing	50000	65000	91000	1000000	40	2	50000	2	7.143	40
Retailing	845000	600000	750000	1000000	28.5714	24.1429	845000	24.143	18.78	25
Retailing	610000	125000	114800	1260000	86.8966	42.069	610000	42.069	119.6	-8.16
Retailing	400000	1266000	1289000	1845000	92.25	20	400000	20	1.6	1.817
Retailing	125000	2251000	1264000	250000	50	25	125000	25	20.83	-43.8
Retailing	58100	51200	165700	124900	35.6857	16.6	58100	16.6	46.11	223.6
Retailing	129000	12260	99800	206600	62.3792	38.9493	129000	38.949	28.91	714
Retailing	91700	15560	10000	214200	66.9166	28.6473	91700	28.647	22.59	-35.7
Retailing	64700	22100	336100	110600	35.6085	20.8307	64700	20.831	15.53	1421
Retailing	27571	46700	221300	83471	26.936	8.89714	27571	8.8971	6.037	373.9
Retailing	75090	55100	66300	95600	48.8503	38.37	75090	38.37	51.71	20.33
Retailing	11600	44110	46200	22500	49.8891	25.7206	11600	25.721	51.56	4.738
Retailing	21500	20000	21000	34000	52.1472	32.9755	21500	32.975	59.72	5
Retailing	45100	22600	33500	66700	40.012	27.0546	45100	27.055	56.02	48.23
Retailing	3100	2100	4500	4400	41.9048	29.5238	3100	29.524	91.18	114.3
Retailing	2345	2000	2000	3300	73.3333	52.1111	2345	52.111	78.69	0
Retailing	490	2500	3100	600	28.5714	23.3333	490	23.333	490	24
Retailing	8100	2100	1900	9600	32.4324	27.3649	8100	27.365	81	-9.52
Retailing	40000	2100	3100	66100	74.2697	44.9438	40000	44.944	330.6	47.62
Retailing	3110	1400	2100	6310	39.6855	19.5597	3110	19.56	140.7	50
Retailing	36100	15000	15000	40600	54.0613	48.0692	36100	48.069	135.2	0

Retailing	28944	30000	29000	44000	66.1654	43.5248	28944	43.525	12.58	-3.33
Retailing	7100	12500	14510	9000	46.1538	36.4103	7100	36.41	338.1	16.08
Retailing	6600	6800	4000	10600	47.9638	29.8643	6600	29.864	314.3	-41.2
Retailing	2140	1500	1500	4140	35.8131	18.5121	2140	18.512	142.7	0
Retailing	1900	1400	1260	4000	34.4828	16.3793	1900	16.379	146.2	-10
Retailing	6290	4510	2100	8590	68.2288	49.9603	6290	49.96	251.6	-53.4
Retailing	6830	10000	10000	8790	52.9837	41.1694	6830	41.169	30.82	0
Retailing	6100	2100	2300	12000	54.2986	27.6018	6100	27.602	40.67	9.524
Retailing	3500	3100	2100	10600	70.1987	23.1788	3500	23.179	29.17	-32.3
Retailing	3200	2000	4500	4700	70.1493	47.7612	3200	47.761	94.12	125
Retailing	4400	9100	8000	5600	56	44	4400	44	40.74	-12.1
Retailing	14200	2100	4100	16300	77.619	67.619	14200	67.619	346.3	95.24
Retailing	8500	2100	2500	10600	70.1987	56.2914	8500	56.291	850	19.05
Retailing	7000	7500	10500	9500	45.2381	33.3333	7000	33.333	280	40
Retailing	6200	5000	5000	7600	72.381	59.0476	6200	59.048	79.49	0
Retailing	5800	2100	5600	7900	71.8182	52.7273	5800	52.727	82.86	166.7
Retailing	7900	10000	15000	10400	49.5238	37.619	7900	37.619	98.75	50
Retailing	40000	65000	75000	85000	38.4615	18.0995	40000	18.1	330.6	15.38
Retailing	3300	2500	3100	5600	44.0945	25.9843	3300	25.984	220	24
Retailing	12200	19000	22000	15700	46.8657	36.4179	12200	36.418	58.1	15.79
Retailing	11000	15600	22100	14100	90.3846	70.5128	11000	70.513	85.94	41.67
Retailing	10700	26500	21450	13200	59.7285	48.4163	10700	48.416	62.57	-19.1
Retailing	23100	22100	4650	42000	53.9846	29.6915	23100	29.692	104.5	-79
Retailing	1300	5600	12590	1800	58.0645	41.9355	1300	41.935	260	124.8
Retailing	1900	2600	2600	4000	29.6296	14.0741	1900	14.074	126.7	0
Retailing	2040	1000	1000	8740	41.0329	9.57746	2040	9.5775	9.067	0
Retailing	10200	10000	56000	22600	36.2761	16.3724	10200	16.372	32.9	460
Retailing	670550	44900	22600	672000	96.4132	96.2052	670550	96.205	3034	-49.7
Retailing	827430	225000	450000	1473430	86.7744	48.7297	827430	48.73	827.4	100
Retailing	989920	560000	750000	1035820	82.3648	78.715	989920	78.715	447.7	33.93
Retailing	949801	225600	114700	1395000	86.3243	58.7748	949801	58.775	658.7	-49.2

Retailing	1064801	144900	22190	1234651	84.5767	72.9416	1064801	72.942	469.3	-84.7
Retailing	61315	251000	521000	83445	40.5142	29.7696	61315	29.77	8.891	107.6
Retailing	25600	21670	24560	47700	28.2249	15.1479	25600	15.148	73.14	13.34
Retailing	111700	121300	121690	154700	87.0079	62.8234	111700	62.823	22.34	0.322
Retailing	525800	221001	121000	647600	96.6567	78.4776	525800	78.478	78.72	-45.2
Retailing	251000	221780	143600	476000	68.2927	36.0115	251000	36.011	36.93	-35.3
Retailing	219430	221450	359000	444430	66.5314	32.8488	219430	32.849	49.19	62.11
Retailing	69690	235679	129090	136690	83.9104	42.7808	69690	42.781	261	-45.2
Retailing	108440	225600	114900	120000	84.4476	76.3125	108440	76.312	1033	-49.1
Retailing	74360	226100	145900	94360	80.8569	63.7189	74360	63.719	70.16	-35.5
Retailing	335709	127000	12700	1780709	88.7294	16.7277	335709	16.728	215.8	-90
Retailing	37900	221300	210100	83800	48.7493	22.0477	37900	22.048	3.357	-5.06
Retailing	1122500	150000	166900	1237400	84.8115	76.9363	1122500	76.936	499.1	11.27
Retailing	72900	151900	2216000	99800	81.8704	59.8031	72900	59.803	8.1	1359
Retailing	75300	462100	500000	97800	46.1321	35.5189	75300	35.519	59.81	8.202
Retailing	32800	230000	245700	121300	51.4201	13.9042	32800	13.904	32.8	6.826
Retailing	161600	345100	448900	935900	80.8902	13.9672	791000	68.366	73.12	30.08
Retailing	283200	221500	161900	425100	65.2995	43.5023	283200	43.502	1281	-26.9
Retailing	144231	144600	221600	325631	93.5479	41.435	144231	41.435	64.36	53.25
Retailing	121580	200000	44900	133150	85.539	78.1061	121580	78.106	99.57	-77.6
Retailing	124510	223790	14960	138700	92.652	83.173	124510	83.173	562.6	-93.3
Retailing	133500	121600	124600	219100	90.9129	55.3942	133500	55.394	60.41	2.467
Retailing	48100	21000	34000	62600	73.9953	56.8558	48100	56.856	5.726	61.9
Retailing	11770	24900	212600	24270	19.7848	9.59485	11770	9.5948	14.01	753.8
Retailing	41000	28800	21900	66900	29.214	17.9039	41000	17.904	41	-24
Retailing	7850	12600	12500	9050	41.5138	36.0092	7850	36.009	61.33	-0.79
Retailing	1145	1200	1400	1500	33.3333	25.4444	1145	25.444	38.17	16.67
Retailing	4700	14990	15000	16700	36.6228	10.307	4700	10.307	23.5	0.067
Retailing	3660	21600	20400	12560	46.8657	13.6567	3660	13.657	17.43	-5.56
Retailing	87800	22100	33100	102700	80.9937	69.2429	87800	69.243	127.8	49.77
Retailing	88660	22130	44120	109960	90.7261	73.1518	88660	73.152	132.8	99.37

Retailing	168220	21090	23100	183000	89.2248	82.0185	168220	82.019	760.1	9.531
Education	208800	301200	124800	350000	100	59.6571	208800	59.657	41.76	-58.6
Education	100600	98000	97000	171800	100	58.5565	100600	58.556	113	-1.02
Education	56200	60100	28900	161200	100	34.8635	56200	34.864	62.44	-51.9
Education	34000	22800	144600	121600	100	27.9605	34000	27.961	34.76	534.2
Education	199200	22100	226100	605100	100	32.9202	199200	32.92	56.91	923.1
Education	159000	26800	26700	185900	100	85.5299	159000	85.53	757.1	
Education	66000	12500	22100	144900	100	45.5487	66000	45.549	98.95	76.8
Education	63200	27800	11500	161900	100	39.0364	63200	39.036	280.9	-58.6
Education	153886	121700	16570	231886	92.0548	61.0901	153886	61.09	122.5	-86.4
Education	162809	22100	21000	185319	61.6663	54.1759	162809	54.176	111.6	-4.98
Financial Services	775000	145600	200000	1000000	100	77.5	775000	77.5	139.6	37.36
Financial Services	1000000	2500000	200000	5000000	100	20	1000000	20	100	-92
Financial Services	1204400	1780000	3450000	3500000	100	34.4114	1204400	34.411	68.82	93.82
Financial Services	1022200	221000	245000	1250000	100	81.776	1022200	81.776	813.9	10.86
Financial Services	300000	225100	241000	1570000	100	19.1083	300000	19.108	13.3	7.064
Workshop	164010	261288	126100	213510	85.3153	65.5358	164010	65.536	105.4	-51.7
Workshop	83510	155600	226100	135050	79.5347	49.1814	83510	49.181	83.68	45.31
Workshop	72750	22000	84500	104650	82.5641	57.3964	72750	57.396	47.99	284.1
Workshop	100810	29500	66500	113300	83.3701	74.1795	100810	74.18	61.06	125.4
Workshop	115100	24900	645900	149600	87.3832	67.2313	115100	67.231	951.2	2494
Workshop	77620	56100	35100	155620	100	49.8779	77620	49.878	141.6	-37.4
Workshop	37000	26800	30100	56800	85.0299	55.3892	37000	55.389	117.5	12.31
Workshop	32800	21200	200000	67900	100	48.3063	32800	48.306	145.1	843.4
Workshop	75100	22600	150000	131200	84.0487	48.1102	75100	48.11	134.1	563.7
Workshop	87320	22600	78900	113610	90.9608	69.9119	87320	69.912	161.4	249.1
Workshop	129900	26600	106000	152900	54.8029	46.5591	129900	46.559	240.6	298.5
Workshop	60500	116800	200000	145600	67.5325	28.0612	60500	28.061	271.2	71.23
Workshop	37800	216000	125900	115600	100	32.699	37800	32.699	168	-41.7
Workshop	338400	216700	116700	463000	69.2181	50.5905	338400	50.591	251	-46.1
Workshop	86500	161200	116700	151000	100	57.2848	86500	57.285	75.09	-27.6

Workshop	96500	21670	11500	184300	92.0809	48.2138	96500	48.214	428.9	-46.9
Workshop	66040	215600	115700	94940	81.4936	56.6867	66040	56.687	56.69	-46.3
Workshop	62400	122500	115000	120000	84.8057	44.0989	62400	44.099	70.19	-6.12
Workshop	45700	21600	56700	66700	100	68.5157	45700	68.516	1016	162.5
Workshop	71900	22500	115600	126500	100	56.8379	71900	56.838	80.25	413.8
Workshop	61200	116700	22600	136800	67.8571	30.3571	61200	30.357	54.8	-80.6
Workshop	58000	215100	114100	80700	51.4997	37.0134	58000	37.013	45.07	-47
Workshop	91500	158090	105600	148400	72.3549	44.6124	91500	44.612	732	-33.2
Workshop	74600	105700	117200	86190	80.7779	69.9157	74600	69.916	33.14	10.88
Workshop	23600	215200	116000	44600	66.8666	35.3823	23600	35.382	201.7	-46.1
Workshop	44000	22100	16700	66700	100	65.967	44000	65.967	386	-24.4
Workshop	92500	115200	107600	114200	100	80.9982	92500	80.998	1321	-6.6
Workshop	44200	141000	22700	161800	100	27.3177	44200	27.318	195.6	-83.9
Workshop	69900	214100	115699	92000	78.2313	59.4388	69900	59.439	59.59	-46
Workshop	74230	22100	15800	86100	42.666	36.7839	74230	36.784	82.75	-28.5
Workshop	35200	216100	104500	37900	100	92.876	35200	92.876	1408	-51.6
Health Care Products and services	45500	37500	45700	68100	40.7784	27.2455	45500	27.246	68.22	21.87
Health Care Products and services	25600	22750	56700	45600	22.664	12.7237	25600	12.724	142.2	149.2
Health Care Products and services	44100	66700	79800	66600	30.7337	20.3507	44100	20.351	257.6	19.64
Health Care Products and services	30410	75600	75900	49150	40.5528	25.0908	30410	25.091	289.6	0.397
Health Care Products and services	30300	17800	21600	67300	29.8978	13.4607	30300	13.461	137.1	21.35
Health Care Products and services	3910	21000	22000	5910	35.7965	23.6826	3910	23.683	558.6	4.762
Health Care Products and services	6700	23000	22500	9200	23.4694	17.0918	6700	17.092	209.4	-2.17
Health Care Products and services	18200	17650	22100	31000	21.3499	12.5344	18200	12.534	97.59	25.21
Health Care Products and services	49780	22800	49700	80400	26.6755	16.5163	49780	16.516	401.5	118
Health Care Products and services	250000	225100	1415780	500000	25	12.5	250000	12.5	55.56	529

Health Care Products and services	120600	125700	267300	187300	62.4333	40.2	120600	40.2	536	112.6
Health Care Products and services	242000	223150	145700	462000	38.1188	19.967	242000	19.967	171.4	-34.7
Health Care Products and services	23400	22570	14800	46100	28.598	14.5161	23400	14.516	16.57	-34.4
Health Care Products and services	26730	220400	116350	38950	63.128	43.3225	26730	43.323	17.68	-47.2
Health Care Products and services	33700	22010	114600	56800	31.9101	18.9326	33700	18.933	234.8	420.7
Health Care Products and services	63000	225100	116700	90800	44.2064	30.6719	63000	30.672	54.22	-48.2
Health Care Products and services	17300	144000	14400	35300	24.4291	11.9723	17300	11.972	76.89	-90
Music and Culture	105400	26700	102100	129000	100	81.7054	105400	81.705	92.29	282.4
Music and Culture	14000	22100	26100	37100	32.0657	12.1003	14000	12.1	14.03	18.1
Music and Culture	54200	221200	114700	77000	65.9811	46.4439	54200	46.444	47.5	-48.1
Music and Culture	115400	21020	115600	206100	100	55.9922	124900	60.602	52.17	450
Liquor Business	6300	25600	14500	20800	31.3253	9.48795	6300	9.488	14.13	-43.4
Liquor Business	76900	21500	29500	101500	47.0561	35.6514	76900	35.651	605.5	37.21
Liquor Business	16370	21500	218700	26770	55.8057	34.1255	16370	34.125	88.01	917.2
Liquor Business	45600	221200	114700	66700	30.9226	21.1405	45600	21.14	27.18	-48.1
Liquor Business	59300	28700	22500	103800	34.0216	19.4363	59300	19.436	222.1	-21.6
Liquor Business	62150	24600	11470	77700	77.8557	62.2745	62150	62.275	291.8	-53.4
Liquor Business	8100	14800	17650	25900	22.6795	7.09282	8100	7.0928	36.65	19.26
Liquor Business	72780	22100	15100	95480	81.8166	62.365	72780	62.365	491.8	-31.7
Liquor Business	2600	26000	15000	12200	45.6929	9.73783	2600	9.7378	56.77	-42.3
Liquor Business	8700	22560	17680	155700	87.4719	4.88764	8700	4.8876	9.898	-21.6
Liquor Business	5600	22100	17100	7900	50.3185	35.6688	5600	35.669	39.72	-22.6
Liquor Business	-500	8500	2500	1700	16.1905	-4.7619	-500	-4.762	-8.33	-70.6
Liquor Business	49600	16800	10750	88800	41.1492	22.9842	49600	22.984	221.4	-36
Liquor Business	53130	14700		92030	80.5867	46.5236	53130	46.524	234.1	-100
Liquor Business	83800	21500	201100	106500	48.1465	37.8843	83800	37.884	72.74	835.3
Liquor Business	52500	66909	22199	97000	30.7254	16.6297	52500	16.63	99.43	-66.8
Liquor Business	68700	26400	88500	111500	50.9831	31.4129	68700	31.413	88.3	235.2

Liquor Business	252750	218400	18700	275450	95.6756	87.7909	252750	87.791	221.3	-91.4
Liquor Business	3700	22500	22799	6700	31.6038	17.4528	3700	17.453	5.481	1.329
Liquor Business	82160	22100	17100	94630	81.0188	70.3425	82160	70.342	71.94	-22.6
Liquor Business	28200	22600	21700	48200	42.2067	24.6935	28200	24.694	190.5	-3.98
Liquor Business	6431	9200	6900	8900	50	36.1292	6431	36.129	13.95	-25
Liquor Business	64870	14700	17800	85000	42.2465	32.2416	64870	32.242	287	21.09
Liquor Business	4200	22100	4700	5600	31.4607	23.5955	4200	23.596	62.69	-78.7
Liquor Business	54180	14000	28000	64280	81.6773	68.8437	54180	68.844	238.7	100
Motor Vehicle service	151100	16499	114200	200000	92.2935	69.7277	151100	69.728	994.1	592.2
Motor Vehicle service	5900	15200	21400	7900	38.7255	28.9216	5900	28.922	7.564	40.79
Motor Vehicle service	77200	22600	13500	99900	46.0157	35.5596	77200	35.56	412.8	-40.3
Motor Vehicle service	7910	14700	12000	10120	46.8519	36.6204	7910	36.62	101.4	-18.4
Motor Vehicle service	12900	10500	15800	31000	37.9902	15.8088	12900	15.809	58.37	50.48
Motor Vehicle service	29000	25800	14400	46600	27.623	17.1903	29000	17.19	185.9	-44.2
Motor Vehicle service	27800	14100	86100	42400	62.8148	41.1852	27800	41.185	24.34	510.6
Motor Vehicle service	6700	22100	14300	18800	17.9904	6.41148	6700	6.4115	40.12	-35.3
Motor Vehicle service	3300	14700	26000	10800	48.8688	14.9321	3300	14.932	14.6	76.87
Motor Vehicle service	36500	22599	18799	59400	40.4082	24.8299	36500	24.83	207.4	-16.8
Hospitality	186200	221100	23100	201000	93.0125	86.1638	186200	86.164	33.25	-89.6
Hospitality	313800	201700	34100	333900	95.1282	89.4017	313800	89.402	31.38	-83.1
Hospitality	120700	219000	147999	165200	87.4074	63.8624	120700	63.862	38.29	-32.4
Hospitality	97100	216700	106700	153200	86.5537	54.8588	97100	54.859	8.503	-50.8
Hospitality	93900	221000	216700	180600	88.7906	46.1652	93900	46.165	81.79	-1.95
Agro-Business	113500	221200	15600	129100	36.8752	32.4193	113500	32.419	256.8	-92.9
Agro-Business	47500	29200	14000	67600	75.3623	52.9543	47500	52.954	254	-52.1
Agro-Business	53190	19100	10500	79290	39.3109	26.3708	53190	26.371	374.6	-45
Agro-Business	18100	20500	18100	38200	17.6688	8.37188	18100	8.3719	112.4	-11.7
Agro-Business	47480	22201	18700	59300	29.4585	23.5867	47480	23.587	401.7	-15.8

Correlation Analysis

Correlation analysis was conducted to examine the relationship between key variables, including macroeconomic factors, business type, size, and strategic responses. The correlation analysis yielded several

significant relationships that provide deeper insights into how MMSMEs respond to macroeconomic dynamics, particularly currency fluctuations.

HO_1 tests the relationship between Macroeconomic factors business type which were insignificantly correlated ($r = -0.009$, $p > 0.05$), the analysis underscores that MMSMEs across different sectors experience relatively uniform exposure to macroeconomic shocks.

HO_2 tests the relationship between currency fluctuation and pricing strategies The analysis found a positive and statistically significant correlation between the two where ($r = 0.040$, $p < 0.05$), the analysis suggests that exchange rate volatility exerts a direct influence on how MMSMEs set or adjust their prices.

HO_3 tests the relationship between exchange rate volatility and business type where a negative correlation between exchange rate volatility and business type ($r = –0.0856$, $p < 0.05$), was observed which indicates that the impact of currency fluctuations on profitability differs by sector.

HO_4 tests the relationship between hedging and supplier relationships where the findings reveal a strong positive correlation ($r = 0.42$, $p < 0.005$),the analysis suggests that firms that maintain strong supplier networks are more likely to employ financial hedging mechanisms

HO_5 tests the relationship between hedging and business size, where the test reveals a positive and significant relationship ($r = 0.1623$, $p < 0.005$) the analysis suggests that, that larger MMSMEs are more likely to employ hedging as a financial risk management tool compared to smaller enterprises.

HO_6 tests the relationship between level of education and hedging. The results indicated a positive correlation ($r = 0.0856$, $p = 0.011$), suggesting a weak but statistically significant association between the two variables at the 0.05 significance level. This implies that as the level of education increases, the likelihood of engaging in hedging practices also tends to rise, although the strength of this relationship is relatively low.

Table 9: Correlation Analysis

Variables Correlated	Correlation Coefficient	Sig (2 Tailed)	Significate at	Comment
HO_1 – Business type and Macroeconomic Factors influence profitability	-.009	.089	0.05	Insignificant Reject null hypothesis.
HO_2 – fluctuation influence pricing strategies and Businesses	0.040	0.046	0.05	Significant accept null hypothesis.
HO_3- Importation of Materials and fluctuation influence pricing strategies	0.36	0.00	.05	significant accept alternative null hypothesis.
HO_4- Hedging & Supplier Relationships	0.42	0.050	.005	significant accept alternative null hypothesis.
HO_5 - Hedging & Business Size	0.1623	0.005	0.005	significant accept alternative null hypothesis.
HO_6 – Level of Education and Heding.	0.0856	0.011	.0 5	Significant accept alternative null hypothesis.

DISCUSSION OF FINDINGS

Demographic Characteristics and Managerial Implications

The study constituted of a verity of age groups, the majority of respondents were aged between 36 and 45 years (36.4%), followed by 26–35 years (25.3%) and 46–55 years (23.2%), similar to the findings of (Chirwa & Odhiambo, 2017). As such this demographic profile was significant, as it influenced strategic responses to kwacha fluctuations.

The study revealed a Gender distribution more predominant of male operators (59.6%) compared to females (40.4%), these findings are consistent with (Common Market for Eastern and Southern Africa, 2020), (Ministry of Finance, 2020), and (World Development Report, 2022) who all reported gender imbalance consistent with sociocultural and financial access constraints. Gender disparities in access to start-up capital and business networks has the likelihood of influencing MSMEs' capacity to adapt to currency shocks. Male-dominated sectors such as manufacturing, retail, and workshops might have better access to capital, which could explain their ability to sustain high gross profit margins (GPM) despite net profit volatility.

The study constituted of more respondents married (65.7%), followed by single (18.9%), widowed (7.5%), and divorced or separated (8.5%). The findings are significant because Marital stability provides a more supportive environment for business continuity and risk management, enabling owners to withstand short-term financial pressures caused by kwacha depreciation.

Most respondents had primary (41.3%) or senior secondary education (33.8%), while only a small proportion possessed tertiary qualifications (12.6% certificate/diploma, 0.5% undergraduate). Which may Suggests that many MSME operators have modest educational backgrounds, which may constrain financial literacy and advanced managerial decision-making (Chilufya & Mwewa, 2022). The observed volatility in NPM and profit growth rates (PGR), particularly in import-dependent sectors such as manufacturing, retail, and hospitality, may partially reflect limited capacity to implement complex hedging strategies or forecast the financial impact of kwacha fluctuations. Conversely, service-oriented sectors with simpler operational models, like education and finance, displayed more stable profitability despite similar demographic characteristics, indicating that sectoral context interacts with managerial capacity to influence resilience to currency shocks.

Sectoral Distribution and Implications

The majority of MMSMEs in the study operate in the retail sector (32.7%), followed by food processing

(21.4%) and technology services (11.1%), with smaller shares in manufacturing, healthcare, motor services, and other sectors. This sectoral composition reflects the trends observed in the Choma District study, where retail and food-based enterprises dominate the MSME landscape similar to the findings of (Chigozie, 2021) and (Lungu & Kaubi, 2017), Notwithstanding that the Retail and food processing MSMEs are highly sensitive to kwacha fluctuations due to their reliance on imported goods and raw materials, which inflates cost of goods sold (COGS) during depreciation periods (Chilufya & Mwewa, 2022).

Enterprise Size and Growth Phase

The distribution of enterprise size macro (40.4%), medium (37.4%), and small (22.2%) echoes a dynamic but uneven MSME ecosystem. This is so because so often medium and small enterprises, are often in the growth or stabilization stages, are principally susceptible to kwacha volatility (Hambayi, 2020), This is so because limited capital buffers and exposures to foreign input costs which implies that these enterprises experience higher erraticism in profitability metrics, as evidenced by extreme fluctuations in net margins and PGR in import-dependent sectors The findings are consistent with the present study where smaller and medium enterprises bear the brunt of currency-induced financial stress.

Trade Orientation and Foreign Exchange Exposure

A striking 98% of the MMSMEs are import-driven, while only 2% are export-oriented, dissimilar to other localities to Ghana and South Africa (Abor & Quartey, 2010), the findings infer that there is a very high dependence on foreign-sourced materials which augments the sensitivity of MMSMEs to kwacha depreciation, as equally noted by (Chilufya & Mwewa, 2022) and (Nyirenda, 2020), which thus affects procurement, pricing decisions, and eventually net profitability. Furthermore, 89.9% of MMSMEs transact primarily in Zambian kwacha, with only a small proportion using multiple currencies, similar to the findings of (Chitambala, 2019), While local currency transactions protect firms from the risk of foreign exchange receivables, they do not insulate them from increased input costs caused by depreciation (Kahunde, et al., 2021), Correspondingly, the limited exposure to export markets (4%) indicates structural barriers that constrain MMSMEs from capitalizing on favorable exchange rates for export-oriented revenue, a trend highlighted in the Choma study and supported by (International Trade Center, 2022).

Financial Reporting and Risk Management

The majority of MMSMEs in the dataset do not prepare formal financial statements (M = 3.35; Mode = 4) and fail to report currency losses (M = 3.09; Mode = 4), which is a major trend with traditional MSMEs in Zambia and Africa at Large (Chigozie, 2021), (Eze & Okpala, 2015), (Kuntashula, 2020), and (Ngugi, et al., 2019), The findings stresses that there is significant lack of compliance with basic accounting standards and limited internal financial control mechanisms. Thus, these deficiencies hinder the ability of MSME operators to precisely track costs related with foreign currency exposure, undermining their capacity to respond effectively to kwacha depreciation. The present study correspondingly underscores that poor financial record-keeping and weak accounting practices limit MMSMEs ' capacity to monitor financial performance and manage risks associated with exchange rate fluctuations.

Impact of Currency Fluctuations on Costs and Profitability

The data further indicate that currency fluctuations suggestively increase procurement costs (M = 2.12; Mode = 2),similar to the findings of (Lakuma & Muhumuza, 2019) which directly constrain profitability. More particularly true because MMSMEs in Choma operate in import-dependent sectors, such as retail, manufacturing, and hospitality, which are principally affected, as depreciation of the kwacha increases the cost of imported raw materials and finished goods, which erodes their profitability.

Exchange Rate Effects on Pricing and Profit Margins

The results revealed that exchange rate fluctuations have an influence on pricing strategies (M = 2.08;

Mode = 2) and profit margins (M = 1.53; Mode = 1) affecting both short-term and long-term performance (M = 1.77; Mode = 1).), similar to the findings of (Lungu & Kaubi, 2017), This confirms that MMSMEs must adjust sales prices frequently to cope with cost variability, a practice that may not always be feasible due to competitive pressures and demand elasticity. Consequently, profitability becomes highly unpredictable, consistent with findings in the present study, where fluctuating input costs and inability to hedge against exchange rate risk led to erratic financial outcomes for MMSMEs .

Macro-Economic Context

Macroeconomic factors such as inflation and exchange rate variability were also identified as influential on MSME profitability (M = 2; Mode = 1). This reflects the broader economic reality in Zambia, where currency instability, combined with rising prices, erodes purchasing power and imposes additional operational challenges for small and medium enterprises. Prior research corroborates these observations, emphasizing that currency instability in developing economies increases business uncertainty, reduces competitiveness, and undermines enterprise sustainability (Belghitar, et al., 2021), (Chitambala, 2019), (Mbao, 2021) (World Development Report, 2022).

Procurement and Financial Adjustment Strategies

The findings on procurement and financial adjustment strategies provide important insights into how MMSMEs in Choma District respond to kwacha fluctuations, reflecting both operational realities and constraints in financial sophistication. The results indicate that MMSMEs predominantly rely on inventory management (M = 2.00; Mode = 1) as a mechanism to mitigate exchange rate risk, whereas strategies such as supplier relationship management and financial hedging (both M = 3.59; Mode = 4) are less commonly practiced, all similar to the finding of (Chigozie, 2021) and (Lungu & Kaubi, 2017). The over dependance on inventory management suggests that MMSMEs prioritize operational flexibility over formal financial instruments when addressing currency volatility (Belghitar, et al., 2021) by adjusting inventory levels, firms attempt to buffer against sudden increases in procurement costs caused by kwacha depreciation. The findings further asserts that MMSMEs often adopt pragmatic, short-term measures such as stockpiling imported inputs or delaying purchases to reduce exposure to foreign exchange fluctuations, (Chitambala, 2019), as such very few MMSMEs do not use complex hedging mechanisms that require higher financial literacy and access to capital markets, which can be attributed to poor financial literacy (Kuntashula, 2020).

Also, the minimal engagement with supplier relationship management and hedging strategies highlights structural and capacity constraints within the MSME sector. Hedging instruments, including forward contracts or currency swaps, are underutilized due to limited awareness, expertise, and access to formal financial services (Banda, 2025) In the same way, supplier relationship management as a strategic approach is constrained by the transactional nature of many MMSMEs' operations and the prevalence of informal supply chains. These limitations are in line with the studies by (Sikabbwele, 2024)and (Chilufya & Mwewa, 2022) who all noted that most MMSMEs operate in environments characterized by informal procurement practices and limited integration into global value chains, making advanced financial risk mitigation strategies largely inaccessible.

Financial Strategies

The analysis of financial strategies among MMSMEs highlights a pronounced reliance on operational measures rather than formal financial instruments to mitigate the effects of kwacha fluctuations. The findings indicate that most MMSMEs do not employ hedging instruments (M = 3.59; Mode = 4) or maintain foreign currency accounts and derivatives (M = 4; Mode = 4). This low adoption of formal financial risk management mechanisms aligns with the observations of (Lungu & Kaubi, 2017) and (Chitambala, 2019) who reported that MMSMEs in Zambia and similar developing economies face structural barriers, including limited financial literacy, restricted access to derivative markets, and high transaction costs.

The preference for operational strategies such as inventory management over financial instruments reflect the practical realities of MSME operations, as established by (Chigozie, 2021) (Ngugi, et al., 2019) (Nyirenda, 2020), many MMSMEs lack the technical knowledge and institutional support required to effectively utilize hedging or derivatives, leaving them vulnerable to exchange rate volatility. The implication of the findings is that most MMSMEs frequently adopt short-term, pragmatic responses to currency fluctuations rather than long-term, formal risk management strategies, which overexposes then to the effects of currency fluctuation.

Sectoral Analysis

The sectoral analysis revealed that the impact of Kwacha fluctuations on MSME financial performance varies significantly across industries.

Manufacturing MSMEs exhibited high gross profit margins (50–90%) but extremely volatile net profit margins (–100% to +60%) and profit growth rates. This pattern indicates strong revenue-generating capacity but high vulnerability to input cost shocks. The manufacturing sector in Choma is particularly sensitive to currency depreciation, which raises the cost of imported raw materials and reduces net margins, thereby contributing to erratic profit performance. Furthermore, because most manufacturing firms in the district do not export, they do not fully benefit from favorable exchange-rate movements.

Technology MSMEs demonstrated comparatively higher resilience. Their moderate net margins and positive return on assets (ROA) suggest less exposure to currency risks. This resilience is attributable to the sector's limited reliance on imported physical inputs and its service-driven income structure. Although foreign exchange volatility can affect the cost of software licenses and imported equipment, most technology MSMEs in Choma are not yet at a scale where such imports dominate their cost structure. Consequently, they experience more stable growth relative to other sectors.

The food processing sector showed moderate exposure to Kwacha fluctuations, with reduced net margins and volatile profit growth. This is driven by the use of imported packaging materials, additives, and certain food inputs. However, firms that rely more heavily on locally sourced raw materials tend to perform better, as depreciation increases operational costs but may benefit exporters (Mwansa, 2020).

The study found that retail MSMEs are the most severely affected by Kwacha depreciation. Though they exhibit substantial turnover (ROA > 200%), their profit growth rates are extremely volatile (–90% to +1400%). This volatility is rooted in their heavy dependence on imported merchandise—including electronics, clothing, groceries, and household goods—whose costs rise immediately when the currency weakens. Despite high turnover driven by fast-moving inventory, retail firms operate with thin margins, limited pricing power, and frequent exposure to exchange-rate-driven stock price adjustments. When the Kwacha depreciates, retailers cannot always pass on increased costs to consumers, resulting in sharp swings in profitability. Consequently, retail MSMEs in Choma remain particularly vulnerable to currency shocks.

The education and financial services sectors demonstrated the highest resilience to Kwacha fluctuations. These sectors consistently recorded positive ROA and stable net profit margins, reflecting mature management practices, largely local revenue streams, and minimal reliance on imported inputs. Their reduced exposure to exchange-rate risk stems from their dependence on domestic demand, although inflationary pressures from depreciation may still influence operational costs and real income (Chitambala, 2019).

Workshops, Motor Services, and Hospitality exhibited extremely high volatility ratios (>200%). These sectors depend heavily on imported consumables and equipment. Motor service providers rely on imported spare parts, lubricants, and automotive tools, all of which become more expensive when the currency weakens, thereby increasing operational costs and compressing margins. Hospitality firms depend on imported foodstuffs, beverages, cleaning supplies, and equipment, while also being susceptible to fluctuations in tourist demand—demand that typically declines under inflationary conditions. Although these sectors record high asset turnover (>200%), the combination of high imported input costs, demand sensitivity, and elevated operating expenses drives extreme profit volatility.

Overall, the high volatility observed in retail, workshops, motor services, and hospitality is driven by a combination of:

Heavy reliance on imported inputs, making them highly sensitive to exchange-rate movements; Thin and competitive margins, limiting their ability to adjust prices in response to rising costs; High turnover but unstable cost structures, amplifying profit fluctuations; Demand variability, especially in hospitality, where consumer spending changes rapidly during inflationary periods; and Limited hedging mechanisms or financial buffers, which increases vulnerability to macroeconomic shocks (Banda, 2025)

Correlation Analysis

Consistent with the Purchasing Power Parity (PPP) Theory, the Pearson correlation coefficient for HO_1 indicated an insignificant relationship between macroeconomic factors and business type. This suggests that all business categories, regardless of their nature, are adversely affected by Kwacha fluctuations. As the Kwacha depreciates, the cost of imports, labor, and general living expenses increases, thereby reducing purchasing power and raising operational costs. This finding aligns with (Chilufya & Mwewa, 2022) who similarly observed that MSMEs across various regions experience relatively uniform exposure to macroeconomic shocks. The insignificant correlation further confirms that currency volatility and inflationary pressures are pervasive, cutting across all business types without discrimination.

Aligned with Transactional Exposure Theory, the results for HO_2 and HO_3 demonstrated positive and significant correlations between currency fluctuations, pricing strategies, and the importation of materials. These findings imply that exchange rate volatility directly influences how MSMEs set or adjust their prices. As the local currency depreciates, transaction costs rise, compelling MSMEs to revise prices upward to offset increased procurement and input expenses. Such reactive pricing behavior reflects short-term responses to external macroeconomic pressures rather than strategic long-term planning. Similar evidence is reported by (Lungu & Kaubi, 2017)and (Mwansa, 2020), who note that exchange rate instability in developing economies often forces firms to make frequent price adjustments, reducing market competitiveness and weakening consumer purchasing power. This is consistent with the present study, which found that import-dependent MSMEs experience heightened cost pressures during periods of Kwacha depreciation, resulting in variability in net profit margins and profit growth.

The results for HO_4 and HO_5 revealed strong positive correlations between hedging practices, supplier relationships, and business size. These findings suggest that MSMEs with stronger supplier networks are more likely to adopt hedging mechanisms, while larger enterprises are better positioned to employ formal financial risk-management tools. This pattern is consistent with the resource-based theory, which posits that firms with greater internal capabilities and external linkages are better able to deploy strategic resources such as hedging instruments. The analysis further indicates that import reliance, pricing adjustments, and sectoral characteristics directly influence profitability, and that businesses with stronger supplier networks and more substantial resource bases are better equipped to manage currency risk. These findings correspond with the work of (Nyirenda, 2020).

HO_6 revealed a weak but statistically significant association between education level and hedging practices. This implies that as the educational attainment of entrepreneurs increases, the likelihood of adopting hedging mechanisms also rises, although the strength of the relationship remains modest. A plausible explanation is that more educated entrepreneurs tend to possess higher financial literacy, better awareness of market instruments, and enhanced analytical capacities to assess currency risks (Mensah, et al., 2021). Consequently, they are more inclined to use formal hedging tools such as forward contracts, futures, or currency diversification.

The study also found a strong positive correlation between hedging and supplier relationships (r =0.42, p< 0.005), indicating that firms with robust supplier networks are structurally better positioned to employ financial hedging mechanisms. Strong supplier relationships can provide favorable payment terms, opportunities for risk-sharing, and access to timely market information, all of which support informed hedging decisions. This finding aligns with OECD (2022), which underscores the role of collaborative supplier networks in strengthening MSME financial resilience.

Integrated Theoretical Contribution

This study strengthens its theoretical contribution by systematically applying three core theories Purchasing Power Parity (PPP), Transactional Exposure Theory, and the Resource-Based View (RBV) to measurable variables and empirically tested hypotheses (HO_1–HO_6). Each theory guided variable selection, the expected direction of relationships, and the interpretation of statistical outcomes.

Purchasing Power Parity (PPP)

PPP posits that exchange rate movements influence relative prices of goods and inputs. This theory informed the analysis of macroeconomic factors, pricing strategies, cost of inputs, and business type exposure. The empirical results supported PPP-based expectations: HO1 revealed an insignificant relationship between macroeconomic factors and business type (r=–0.009), suggesting that exposure to macroeconomic shocks is broadly uniform across sectors. Conversely, HO2 showed a positive association between currency fluctuations and pricing strategies (r = 0.040, p< 0.05), consistent with PPP's prediction that exchange rate changes shape price-setting behavior. These findings demonstrate how PPP manifests in MSME cost structures and pricing dynamics within the Zambian context.

The Transactional Exposal theory

Transactional Exposure Theory explains how exchange rate volatility translates into domestic price, cost, and profitability shifts. This framework informed the analysis of pricing strategies, profitability effects, and sector-specific exposure (HO_2–HO_3). The positive correlation between currency fluctuations and pricing strategies in HO_2 confirms partial transactional exposure, indicating that firms adjust prices when exchange rates move. HO_3 showed a negative correlation between exchange rate volatility and business type ($r = -0.0856$, $p < 0.05$), highlighting sectoral differences in exposure. These findings illustrate that Zambian MSMEs experience uneven transactional exposure, reflected in sector-dependent pricing and profitability responses.

Resourced Based View Theory

RBV emphasizes that firm performance is shaped by internal resources and capabilities. This theory guided hypotheses HO_4–HO_6, focusing on hedging strategies, supplier relationships, business size, and owner/manager education. The strong positive correlation between hedging and supplier relationships ($r = 0.42$) supports RBV's emphasis on relational capital as a strategic resource. HO_5 showed that larger firms are more likely to adopt hedging practices ($r = 0.1623$), reflecting the role of resource availability. HO_6 demonstrated a positive relationship between education level and hedging ($r = 0.0856$), highlighting human capital as a key determinant of risk management capability. Collectively, these findings extend RBV by showing that MSME hedging behavior in Zambia is shaped by internal resources, including knowledge, firm size, and network strength.

CONCLUSION

The study examined the impact of kwacha fluctuations on the financial performance of MSMEs in Choma District, with concentration on how demographic, sectoral, and managerial characteristics influence firms' responses to currency volatility. The present study revealed that demographic variable such as age, gender, marital status, and education play a critical role in shaping managerial decision-making and resilience to macroeconomic shocks. The majority of MSME operators have modest educational backgrounds, which constrains their capability to interpret financial risks, implement hedging strategies, and make data-driven managerial decisions.

The Study further established that the MSME landscape in Choma is dominated by import-dependent enterprises, mostly in retail and food processing sectors, thus making them most exposed to kwacha depreciation. The study also found that while manufacturing enterprises generate high gross profit margins, they experience volatile net profits due to increased import costs. On the contrary, service-oriented sectors such as education and financial services exhibited greater stability and resilience, mainly due to their reliance on local inputs and abridged exposure to exchange rate variations.

Furthermore, the study revealed that MSMEs rely principally on informal and operational strategies such as inventory management to cope with currency volatility, where as the adoption of formal financial risk management tools such as hedging, currency swaps, or forward contracts are tremendously limited. This low uptake is greatly ascribed to inadequate financial literacy, restricted access to capital markets, and weak supplier relationships. The correlation analysis further accentuated those larger enterprises and those with stronger supplier networks are more likely to employ hedging mechanisms, supporting the resource-based theory that firm capacity and access to resources determine strategic resilience.

Overall, the findings highlight that MSMEs in Choma District face systemic vulnerabilities to kwacha fluctuations as a result of import dependence, weak financial management practices, and limited macroeconomic awareness. Consequently, profitability and growth remain erratic, with only a few sectors demonstrating sustained financial performance amid currency volatility.

RECOMMENDATIONS

Based on the findings, the study proposes the following recommendations:

The Ministry of Small and Medium Enterprise Development, in partnership with financial institutions and local training centres, should implement targeted financial literacy programs, which basically focus on exchange rate risk management, budgeting, and the use of formal financial instruments such as forward contracts and hedging tools.

The Government and financial institutions in Zambia should create simplified and affordable hedging facilities tailored for MSMEs ,which may include pooled hedging schemes or SME friendly derivative products to protect against foreign currency exposure.

MSMEs should be encouraged to build long-term partnerships with suppliers to negotiate favourable payment terms and joint risk-sharing arrangements. Reinforced supplier networks enhance bargaining power and reduce susceptibility to currency shocks. Additionally, to reduce import dependence, MSMEs particularly in retail and food processing sectors should be incentivized to source raw materials locally through tax rebates, production grants, or cooperative purchasing schemes, which may reduce foreign exchange exposure and stabilize input costs.

Capacity-building interventions should prioritize the adoption of formal accounting systems and financial reporting standards amongst MSMEs. The enhancement of improved record-keeping will permit firms to monitor costs, assess exposure to currency risks, and make informed business decisions. Policymakers should design targeted interventions that address sectoral differences in vulnerability, which can be done through, forex access support or tax incentives and or the enhancement of digital infrastructure investments to sustain growth.

Banks should adopt more inclusive financial models that recognize the unique needs of small enterprises by providing flexible credit facilities, foreign currency accounts, and advisory services aimed at improving financial resilience. The Government of Zambia should pursue stable monetary and fiscal policies to minimize exchange rate volatility. Maintain macroeconomic stability which will improve business confidence, reduce operational uncertainty, and enhance MSME sustainability.

REFERENCES

1. Abor, J. & Quartey, P., 2010. Issues in SME development in Ghana and South Africa.. International Research Journal of Finance and Economics, Volume 39, p. 218–228..
2. Africa Economic Outlook (AEO), 2021. From Debt Resolution to Growth: The Road Ahead for Africa, South Africa: African Development Bank (ADC).
3. Akinlo, A. E., 2015. Exchange rate volatility and SME profitability in Nigeria.. Journal of Economics and Sustainable Development, 6(7), pp. 45-53.
4. Banda, B., 2025. Financial Instruments. Formal Vs Informal Fianancial Instruments , Issue unpublished paper.
5. Bank of Zambia, 2021. MONETARY POLICY COMMITTEE STATEMENT, Lusaka: Bank of Zambia.
6. Barberis, N. & Thaler, R., 2003. A Survey of Behavioral Finance. In Handbook of the Economics of Finance,. 1, 1053–1128: s.n.
7. Barney, J. B., 1991 . Firm Resources and Sustained Competitive Advantage.. Journal of Management,, 17(1), p. 99–120..
8. Belghitar, Y., Clark, E., Dropsy, V. & Mefteh-Wali, S., 2021. The effect of exchange rate fluctuations on the performance of small and medium sized enterprises: Implications for Brexit. Quaterly Review of Economics and Fianance , pp. 399-410.
9. Cassel, G., 1918. Abnormal Deviations in International Exchanges.. The Economic Journal, , 28(112), p. 413–415..
10. Chigozie, O. C., 2021. Effect Of The Naira Devaluation On Small And Medium Scale Enterprises In Nigeria, OGUN STATE, NIGERIA: MOUNTAIN TO UNIVERSITY, IBAFO.

11. Chilanga, M. & Kunda, D., 2025. Development and Implementation of the Predictive System of Zambian Kwacha Rate using Data Minining. European Journal of Engineering and Technology Research, 10(2), pp. 31-38.

12. Chilufya, J. & Mwewa, B., 2022 . Exchange rate volatility and SME performance:Evidence from Zambia.. Zambian Journal of Economics, 8(1), pp. 56-74.

13. Chirwa, T. G. & Odhiambo, N. M., 2017. The nexus between key macroeconomic determinants and economic growth in Zambia: A dynamic multivariate granger-causality linkage,". Working Papers 23476, University of South Africa, Department of Economics..

14. Chitambala, M. C., 2019. EFFECTS OF CURRENCY DEPRECIATION ON GROWTH IN ZAMBIA, Lusaka Zambia: University of Zambia .

15. Choma Municipal Council, 2021. CHOMA INTERGRATED DEVELOPMENT PLAN. Choma, Zambia: Choma Municipa Council .

16. Common Market for Eastern and Southern Africa, (., 2020. SOCIO-ECONOMIC IMPACTS EVIDENCE FROM COMESA REGION, Tanzania: Comesa.

17. Dornbusch, R., 1987. . Purchasing Power Parity.. s.l.:In: Eatwell, J., Milgate, M., &.

18. Eiteman, D. K., Stonehill, A. I. & Moffett, M. H., 2016. Multinational Business Finance. 14 ed. s.l.:Pearson Education..

19. European Union, 2015. THE IMPACT OF CURRENCY FLUCTUATIONS. Brussels, European Union.

20. Eze, A. G. & Okpala, C. S., 2015 . Quantitative analysis of the impact of exchange rate policies on Nigeria's SME performance.. Journal of Economics and Finance, 6(6), , 6(6), p. 01–09..

21. Hambayi, T., 2020. Why is the Zambian Kwach depirciating. insight partners africa, Issue https://www.insightpartnersafrica.com/why-is-the-zambian-kwacha-depreciating/.

22. International Trade Center, 2022. Meeting of the Joint Advisory Group on the International Trade Centre, 57th session, s.l.: https://unctad.org/meeting/meeting-joint-advisory-group-international-trade-centre-57th-session.

23. Kahunde, R., Lakuma, C. P. & Sserunjog, B., 2021. How currency fluctuations affect SME access to credit. Brife Ploicy , pp. 1-4.

24. Kuntashula, J. A., 2020. EFFECTS OF EXCHANGE RATE CHANGES ON THE ZAMBIA´S TRADE, s.l.: University West .

25. Lakuma, C. M. R. & Muhumuza, 2019. F. Financial inclusion and micro, small, and medium enterprises (MMSMEs) growth in Uganda.. J Innov Entrep 8, 15 (2019), 8(15).

26. Lawrence, R., 1976. Managing Foreign Exchange Risk.. Journal of International Business Studies,, 7(1), pp. 5-10.

27. Lungu, D. & Kaubi, M., 2017. The impact of kwacha depreciation on small and micro enterprises (MSMEs): Case study: MSMEs in the. International Journal of Multidisciplinary Research and Development, 4(9), pp. 4-17.

28. Madura, J. (., 2008. International Financial Management (9th ed.). 9th ed. s.l.: Mason, OH: South-Western Cengage Learning.

29. Mbao, F. Z., 2021. Dynamic Behaviour and Drivers of the Kwacha-US. Bank of Zambia Working Paper Series , pp. 1-29.

30. Mensah, J., K, Amoah, L. & Tetteh, S., 2021. Exchange rate volatility and SME pricing behaviour in Ghana. African Journal of Economic Policy, 28(2), p. 110–125..

31. Metumara, D. M., 2023. Continued Depreciation of the Naira and Its Impact on the economy, Ota, Nigeria: Covenant University,.

32. Ministry of Finance, 2020. Economic Report, Lusaka: Government Printers.

33. Mwansa, D., 2020. A STUDY OF THE MACRO ECONOMIC FACTORS AFFECTING THE VALUE OF THE ZAMBIAN KWACHA, Lusaka Zambia: The University of Zambia.

34. Myers, S. C., 1977. Determinants of Corporate Borrowing.. Journal of Financial Economics,, 5(2), pp. 147-175.

35. Nanjundeswaraswamy, T. S. & Divakar, S., 2021. DETERMINATION OF SAMPLE SIZE AND SAMPLING METHODS IN APPLIED RESEARCH. Proceedings on Engineering Sciences ·, pp. 25-32.

36. Ngugi, J. K., Gakure, R. & Waititu, G., 2019. The influence of currency fluctuation on SME pricing strategies in Kenya.. International Journal of Business and Social Science, , 10(4), pp. 88-95.

37. Nyirenda, T. A. C., 2020. THE IMPACT OF DEPRECIATING KWACHA ON FINANCIAL , Zambia: Cavendish University Zambia.

38. Opler, T. C. & Titman, S., 1994. Financial Distress and Corporate Performance.. Journal of Finance, 49(3), , 49(3), p. 1015–1040..

39. Parker, J., 2015. THEORIES OF INVESTMENT. USA: Economics 314 Coursebook.

40. Peteraf, M. A., 1993. The Cornerstones of Competitive Advantage: A Resource-Based View.. Strategic Management Journal, 14(3), , 14(3), p. 179–191..

41. Prerna Salvi & Suchismita Sengupta, 2016. Effect of RUPEE Depreciation on SME SECTOR. Journal of Business and Management, Issue www.iosrjournals.org, pp. 96-102.

42. Rogoff, K., 1996. The Purchasing Power Parity Puzzle.. Journal of Economic Literature, 34(2), pp. 647-668.

43. Shapiro, A. C., 2006. Multinational Financial Management. Hoboken, NJ: Wiley. ed. s.l.:8th .

44. Sikabbwele, N., 2024. EXCHANGE RATE VOLATILITY AND TRADE OUTCOME, Lusaka Zambia : University of Lusaka .

45. Siwale, T., 2021. One year on: Zambian economy during COVID-19. International Growth Center , 18 March, pp. 1-3.

46. Sternberg, R. J. & Zhang, L.-f., 2011. Revisiting the Investment Theory of Creativity. CREATIVITY RESEARCH JOURNAL, 23(3), pp. 229-238.

47. Tambunan, t., 2019. The impact of the economic crisis on micro, small, and medium enterprises and their crisis mitigation measures in S outheast. Asia & The Pacific Policy Studies, Volume 6, pp. 19-39.

48. Thaler, R. H., 1993. Advances in Behavioral Finance.. s.l.:Russell Sage Foundation..

49. Wernerfelt, B., 1984. A Resource-Based View of the Firm.. Strategic Management Journal, , 2(5), p. 171–180..

50. Whitaker, R. B., 1999. The Early Stages of Financial Distress.. Journal of Economics and Finance,, 23(2), p. 123–132..

51. World Development Report, 2022. Finance for an Equitable Recovery,, s.l.: https://www.worldbank.org/en/publication/wdr2022#downloads.

52. Zambanker, 2020. BoZ responds to deteriorating Macro economic Environment and Covid 19. A Bank of Zambia Journal , pp. 1-44.