

# Breaking Through Limits: Exploring Factors Hampering Growth in Zambia's Capital Markets-Lusaka Securities Exchange Perspective

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## Abstract

This study investigates the factors constraining the growth of capital markets in Zambia, focusing specifically on the Lusaka Stock Exchange (LUSE) with its objectives 1. To investigate the specific factors contributing to the limited participation from retail investors in the securities exchange. 2. To assess the influence of macroeconomic factors, such as government policies, economic stability, and currency fluctuations, on the growth of securities exchange and broader capital markets in Zambia. 3. To formulate strategies for improving the operations of the Lusaka Stock Exchange markets. The study utilised a quantitative method, a descriptive design, and using both primary and secondary data. The primary data was collected using questionnaires with a sample size of 100 and got a 100% response rate. Through regression analysis of quantitative data, the study identifies key inhibiting factors and recommends strategic initiatives. The study findings revealed investors in education programs, technological innovation, and sustainable development initiatives in fostering market resilience and inclusivity contribute to the growth of capital market. The study proposed a strategic framework encompassing initiatives such as integrating ESG criteria, promoting fintech solutions, and leveraging digital platforms for disseminating educational content.

The implications of the study's findings extend to practice, policy formulation, and avenues for future research. Policymakers stand to benefit from insights derived from regression analysis, enabling them to anticipate economic conditions, inform policy decisions, and guide investment strategies effectively. Future research endeavours should delve into regulatory frameworks, the impact of policy interventions, and longitudinal studies to track market trends and assess the long-term effectiveness of initiatives. By addressing these challenges and implementing proposed strategies, Zambia's capital markets can play a more significant role in the country's GDP and foster sustainable growth.

**Keywords:** Capital markets, Lusaka Stock Exchange, LuSE All Share Index, technological innovation, regression analysis, financial infrastructure, ESG criteria, economic conditions, GDP growth.

## 1. Introduction

Capital markets are essential for economic growth, providing companies a means to raise long-term finance for investment and expansion (Hussain, 2011; Hostetter, 2015; Tembo, 2018). These markets offer liquidity, price discovery, reduced transaction costs, and risk transfer, facilitating individuals, companies, and governments to raise funds through stock and bond sales. However, Zambia's capital market, especially the Lusaka Stock Exchange (LUSE), remains underdeveloped, with financial services being less accessible or of poorer quality compared to international standards (Hussain, 2011; Hostetter, 2015; Tembo, 2018).

Capital formation is pivotal for economic growth, necessitating substantial investments in infrastructure, education, and industrial ventures (DiPiazza et al., 2016; Hostetter, 2015). Capital markets play a role in encouraging saving, promoting investments, and supporting entrepreneurship by offering diverse financial instruments (Levine & Zervos, 1996; Gursamy, 2019). Globally, capital markets are witnessing innovations like algorithmic trading and AI-driven risk analysis, which are more prevalent in developed countries (Hostetter, 2015; Nahuway, 2018).

The LUSE aims to empower Zambians through share ownership, promote investment, and facilitate trading (Zambian Bulletin, 2014). Despite its significance, the LUSE faces challenges such as economic downturns, lack of liquidity, and insufficient listings (Jefferis & Okeahalam, 2012; Banda, 2015; Phiri, 2018). These challenges result in limited investor participation, low public awareness, high transaction costs, and outdated financial infrastructure (DiPiazza et al., 2006; Markets, 2017; Tembo, 2018).

The study aims to investigate the factors constraining the growth of Zambia's capital markets, focusing on the LUSE. The research objectives include identifying factors limiting retail investor participation, assessing the impact of macroeconomic factors on market growth, and formulating strategies to improve LUSE operations.

The study's significance lies in its potential to highlight challenges facing the Zambian stock market and propose solutions. It aims to contribute to the body of knowledge on stock market growth in emerging nations, benefiting stock exchange management, brokers, policymakers, investors, and researchers (Rosca et al., 2021). The findings could guide efforts to promote

capital market development in Zambia and other developing countries.

## **2. Literature Review and Conceptual Framework**

### *2.1 General Discussion of the Main Concepts under Capital Markets*

Capital markets in Zambia are instrumental in the country's economic development, serving as a platform for businesses and governments to raise long-term funds. These markets involve various key elements: stock exchanges, bond markets, regulatory frameworks, and financial intermediaries.

#### **2.1.1 Stock Exchanges in Zambia**

The Lusaka Stock Exchange (LuSE) is Zambia's primary platform for trading equities and securities. Operating under the Securities Act of 2016, LuSE is regulated by Zambia's Securities and Exchange Commission (SEC). It facilitates capital raising for companies and offers investment opportunities to both domestic and international investors.

#### **2.1.2 Bond Markets and Debt Instruments**

Zambia's bond market is crucial for raising funds through debt instruments for both the government and corporations. This market trades government bonds, corporate bonds, and other fixed-income securities. Investors can earn interest income by lending capital to these issuers. The SEC oversees the bond market to ensure transparency and protect investor interests.

#### **2.1.3 Regulatory Framework and Investor Protection**

The regulatory framework of Zambia's capital markets aims to protect investors and uphold market integrity. The SEC oversees stock exchanges, brokerage firms, and other market entities. Regulations such as disclosure requirements, prohibitions against insider trading, and corporate governance standards ensure a transparent and equitable marketplace.

#### **2.1.4 Role of Financial Intermediaries**

Financial intermediaries like brokerage firms, investment banks, and asset management companies are essential in Zambia's capital markets. They facilitate transactions, offering services like brokerage, underwriting, investment advisory, and fund management. Their participation boosts market liquidity and efficiency, providing investors with a diverse range of investment options.

### *2.2 Theoretical Framework*

The theoretical framework serves as the blueprint for the dissertation, guiding the entire research process and structuring the approach to the study both philosophically and methodologically (Grant & Osanloo; Eisenhart, 1991). It encompasses selected theories that guide understanding and research on the topic, ensuring they align logically with the research question (Lovitts, 2005).

### 2.2.1 The Capital Market

The capital market is defined as a market for financial assets other than money, facilitating the exchange of long-term claims and funds (Polakoff, 1981; Howells, 1964). It involves the trading of bonds, equities, and other financial investments like shares (Rutterford, 1983).

### 2.2.2 The Efficient Market Hypothesis (EMH)

Capital markets contribute to economic growth by aiding in price discovery, liquidity provision, and reducing transaction costs (Yartey and Adjasi, 2017; Garcia and Lieu, 1999). The Efficient Market Hypothesis (EMH) posits that in a perfect market, security prices reflect all available information and adjust quickly to new information, categorizing market efficiency into weak, semi-strong, and strong forms (Farmal, 2007; Burton, 2016).

### 2.2.3 The Behavioural Theory

Behavioural finance challenges the EMH by acknowledging that investors are influenced by emotions and subjective factors, leading to irrational investment decisions (Gitman, 2016). Emotions like greed and fear often override rational analysis, affecting decision-making processes.

### 2.2.4 The Agency Theory

Agency theory analyses the complex relationships within modern corporations, focusing on conflicts of interest between managers, stockholders, and creditors (Smith & Jensen, 2012). Governance indicators reflect institutions' ability to minimize transaction and agency costs, ultimately benefiting shareholders (Hooper et al, 2005).

### 2.2.5 The Capital Asset Pricing Model (CAPM)

The CAPM, developed by Sharpe (1964) and Linter (1965), estimates the cost of capital for project valuation (Brounen et al.2004). It calculates expected returns based on risk-free rates, risk premiums, and stock risks, providing a framework to evaluate and link risk and return in financial decision-making (Ball, 2001; Gitman, 2006).

Stock market development has seen significant growth, especially in emerging markets, impacting the financial structures of developing countries and capital flows from developed nations. The capitalization ratio, indicating stock market development, has surged in leading developing economies during the 1980s and 1990s (Levine & Zervos, 1996). Capital markets, as part of modern economies' financial sectors, promote economic growth through efficient savings mobilization (Schmidt –Hebbal et al, 1996).

## 2.3 Empirical Studies

### 2.3.1 Global Perspective

Research globally highlights the growth and significance of capital markets. Goldsmith (2009) emphasized recent developments, while Levine (2015) linked stock markets to economic growth by enabling firm ownership changes and diversified portfolios. A review of literature spanning five continents reveals key market insights.

The New York Stock Exchange (NYSE), the world's largest equities-based exchange, transitioned from private to public ownership in 2005 and has since merged with European exchanges, now owned by Intercontinental Exchange. As of 2017, NYSE operates electronically from 9:30 AM to 4:00 PM ET on weekdays, excluding federal holidays. Mergers and acquisitions have expanded NYSE's global reach (Yeught, 2016).

London Stock Exchange, with 2,600 companies from over 60 countries, is vital to the UK's economic development, despite limited research on its impact (Sheilla Nyasha, 2013). Its market capitalization was US\$3.88 trillion in November 2018 (World Federation of Exchanges, 2012).

India's stock markets, dating back nearly 200 years, have evolved significantly, paralleling global standards. The Bombay Stock Exchange (BSE), Asia's first, had a market capitalization exceeding \$2.3 trillion in 2017 (Bharti V. Pathak). Regulatory reforms, spearheaded by the Securities Exchange Board of India (SEBI), have modernized India's financial sector, integrating it with global markets (Roy, 2016; Hussain, 2011; Cyuzuzo, 2018; Nahuway, 2018; Kuddus, 2019; Genesis Analytics, 2020).

### 2.3.2 African Perspective

African capital markets have grown since the 1990s, expanding from eight to 19 markets by diversifying and doubling market capitalization between 1992 and 2002 (Yartey and Adjasi). Despite growth, challenges persist: low liquidity, limited listings, inadequate regulation, and poor corporate governance.

Nigeria's Stock Exchange, established in 1960, boasts 288 listed companies with a market capitalization of US\$59 billion. Babalola & Adegbite (2018) identified both internal and external challenges hindering its growth, including market size, liquidity issues, and regulatory inefficiencies.

In North Africa, capital market development has been historically limited, with challenges in both sovereign and corporate bond markets (Wilson, 2012; Anzagra, 2014).

East Africa, particularly Nairobi Stock Exchange, faces barriers like stringent listing requirements, limited institutional investors, and regulatory complexities (Kibuthu, 2005).

The Dar-es-Salaam Stock Exchange in Tanzania, operational since 1998, has 28 listed companies with a market capitalization of US\$8.9 billion (Ziorklui, Nyagetera and Rutasitara, 2001).

South Africa's Johannesburg Stock Exchange (JSE), founded in 1887, lists 375 companies with a market capitalization of \$891.74 billion.

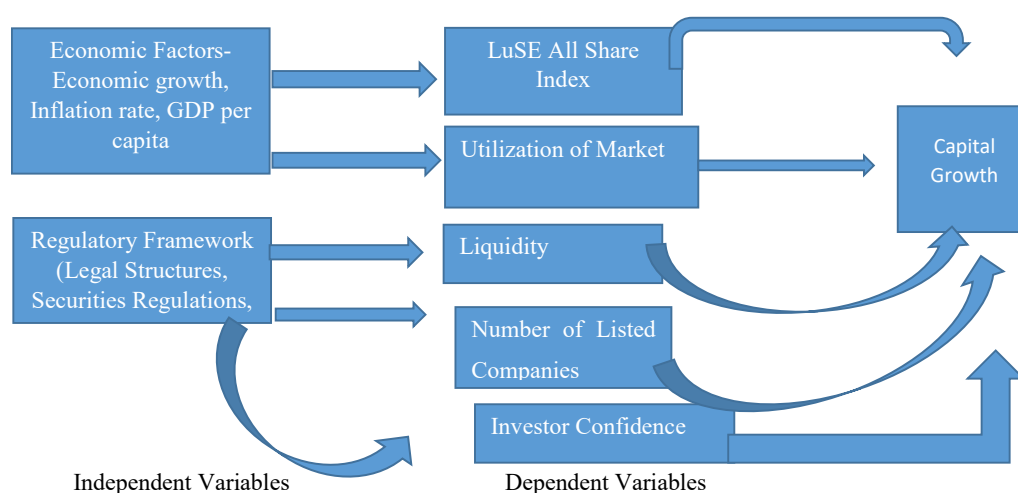
Malawi's Stock Exchange, inaugurated in 1996, has faced challenges in attracting listings and expanding beyond its 13 current companies.

Botswana Stock Exchange, established in 1989, has 36 listings dominated by foreign-based mining companies, with a market capitalization of 412 million Botswana Pula.

### 2.5 Overview of the Zambian Capital Market

The Lusaka Securities Exchange (LuSE) was established in 1993 and became operational in 1994 as part of Zambia's economic reform program (Tembo, 2018; Phiri, 2016). LuSE facilitates both debt and equity trading, aiding government projects and private sector growth. With six broker members, LuSE requires listed companies to meet specific criteria, such as minimum capital and shareholder requirements (The World Bank, 2019). Being listed offers tax incentives, which can attract more companies to the market. The Securities and Exchange Commission of Zambia oversees LuSE's regulatory matters, promoting transparency and market effectiveness (LuSE Handbook, 2013).

### 2.6 Conceptual Framework



Source: Authors own design, 2023.

Figure 1. Conceptual Framework

## 3. Research Methodology

### 3.1 Philosophical Assumptions

The study is grounded in the positivist perspective, emphasizing objective and empirical investigation (Creswell & Creswell, 2017). Adopting a quantitative approach, the study aims to systematically analyze factors influencing Zambia's capital markets growth (Smith, 2015). It uses exclusively quantitative methods, seeking rigorous, statistically sound insights without subjective biases (Teddlie & Tashakkori, 2009).

### 3.2 Research Design

The study adopted a descriptive research design and a correlation design combining quantitative data collection and analysis methods (Cameron, 2009). The descriptive design facilitates a comprehensive and in-depth exploration of the research topic, allowing for a

more holistic understanding of the phenomenon under investigation. According to Creswell (2017) descriptive research design proved to be effective in providing a nuanced and multifaceted understanding of the research topic, enriching the study's findings, and contributing to the advancement of knowledge in the field. The correlational research design measured the relationship between independent variables and the dependent variable of this study (Cresswell, 2014).

### *3.3 Population*

The study targets around 78,000 individuals influential in the Lusaka Securities Exchange's capital market dynamics. This includes active participants, potential listing companies, and regulatory entities.

### *3.4 Sampling*

The population choice ensures a comprehensive sample capturing the capital market ecosystem. The sample size calculation based on Yamane's formula results in 100 respondents, distributed across various categories (SEC Management, LuSE Management, Brokerage Firms, etc.).

### *3.5 Sampling Framework*

The framework employs random, purposive, and stratified sampling techniques to ensure representation, minimize bias, and enhance data richness.

### *3.6 Data Sources*

Two major sources are primary and secondary data. Primary data comes from structured interviews and questionnaires with key market stakeholders. Secondary data sources include government publications, academic journals, and LuSE and SEC publications.

### *3.7 Data Collection*

The primary data collection method involves interviews and questionnaires. The instruments were pre-tested for clarity and effectiveness, with electronic distribution via platforms like Google Forms.

### *3.8 Data Analysis*

Quantitative data from questionnaires will be analyzed using SPSS. Descriptive statistics and tests like regression analysis and ANOVA will be employed to examine relationships between liquidity and capital market growth.

## **4. Reliability and Validity**

Questionnaires, as highlighted by Bryman and Bell (2003), often face challenges in validity due to potential respondent biases such as dishonesty or giving socially desirable answers. Reliability, on the other hand, refers to the consistency of measurement instruments without random errors. Validity, as described by Myers (2009), is the extent to which a test or instrument accurately measures what it intends to measure. Validity can be categorized into



content, criterion, logical, or construct validity.

In this study, validity will be ensured by aligning questionnaire questions with the research objectives and literature review. This approach aims to maintain relevance and accuracy in measuring the intended constructs (Bryman & Bell, 2003; Myers, 2009).

## 5. Ethical Considerations

The researcher received approval from the Ethics Committee at the University of Zambia's Directorate of Research and Graduate Studies (DRG) to conduct the study. Ethical considerations were prioritized throughout the research, including obtaining informed consent from participants, explaining the study's purpose and their rights, and ensuring confidentiality of responses. Unique identifiers will be used for participants, and data will be securely stored. The study will comply with ethical guidelines and minimize risks to participants. All participants' information will remain anonymous and confidential.

## 6. Analysis of the Results

### 6.1 Regression Analysis

Table 1. Regression Analysis of the LuSe All Share Index and The Inflation Rate

Variables entered/Removed <sup>a</sup>			
Model	Variables Entered	Variables Removed	Method
1	Inflation Rate (%) <sup>b</sup>		Enter

a. Dependent Variable: LuSE All Share Index.

b. All requested variables entered.

The Purpose of doing a regression analysis is is to examine the relationship between the LuSE All Share Index (dependent variable) and the inflation rate (independent variable).

Table 2. The model summary table

Model Submmary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.277 <sup>a</sup>	.077	.067	110109.604

a. Predictors: (Constant), Inflation Rate (%)



The model summary table evaluates the regression model's fit and the relationship between the LuSE All Share Index (dependent variable) and inflation rate (independent variable). The R-squared value of 0.277 suggests that about 27.7% of the LuSE All Share Index variation is explained by inflation rate changes. The adjusted R-squared value, at 0.067, indicates 6.7% of the LuSE All Share Index variability is explained by inflation rate after considering the model's complexity. The standard error of the estimate, 110,109.604, shows the average prediction error made by the model in estimating the LuSE All Share Index based on inflation rate changes.

 Table 3. ANOVA<sup>a</sup> Table

ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	97707901808	1	97707901808	8.059	.006 <sup>b</sup>
	Residual	1.176E+12	97	12124124920		
	Total	1.274E+12	98			

a. Dependent Variable: LuSE All Share Index.

b. Predictors: (Constant), Inflation Rate (%).

The regression sum of squares indicates that about 97.71 billion units of the LuSE All Share Index's variation is explained by the inflation rate predictor in the model. With 1 degree of freedom, each degree accounts for this variability. An F-statistic of 8.059 and a significance level of 0.006 suggest a statistically significant relationship between inflation rate and LuSE All Share Index. The residual sum of squares, representing unexplained variability, is around 1.176 trillion units. The total sum of squares, including all variability, is approximately 1.274 trillion units.

Table 4. The coefficients table

Coefficients <sup>a</sup>					
Model	Unstandardized B	Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
1 (Constant)	491466.769	25646.436		19.163	<.001
Inflation Rate (%)	6764.004	2382.672	.277	2.839	.006

a. Dependent Variable: LuSE All Share Index.

The coefficients table reveals that the constant term, predicting the LuSE All Share Index when inflation rate is zero, is 491,466.769 with a standard error of 25,646.436, and is highly significant with a t-value of 19.163 and a significance level of <.001. The inflation rate coefficient of 6,764.004 indicates that the LuSE All Share Index increases by this amount for each unit rise in inflation. It has a standard error of 2,382.672 and is statistically significant with a t-value of 2.839 and a significance level of 0.006. The beta of 0.277 shows a positive relationship between inflation rate and LuSE All Share Index. These results confirm that both the constant term and inflation rate significantly predict the LuSE All Share Index, supporting the hypothesis that inflation rate influences the LuSE All Share Index positively in Zambia's capital market.

Table 5. Regression Analysis of the LuSe All Share Index and Real Effective Exchange Rate

Variables Entered/ Removed <sup>a</sup>			
Model	Variables Entered	Variables Removed	Method
1	Real Effective exchange Rate ZMW/USD <sup>b</sup>	-	Enter

a. Dependent Variable: LuSE All Share Index.

b. All requested variables entered.

The Purpose of doing a regression analysis is is to examine the relationship between the LuSE All Share Index (dependent variable) and the real effective exchange rate (independent variable).

Table 6. The model summary Table

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.690 <sup>a</sup>	.476	.471	82924.737

a. Predictors: (Constant), Real Effective exchange Rate ZMW/USD.

The model summary reveals a moderately strong positive correlation ( $R = 0.690$ ) between the LuSE All Share Index and the real effective exchange rate. Approximately 47.6% of the LuSE All Share Index variability is explained by the real effective exchange rate (adjusted R-square = 0.476). The standard error of the estimate is 82,924.737, indicating prediction accuracy. The regression model includes a constant term as the intercept and the real effective exchange rate (ZMW/USD) as the independent variable. These results indicate that the real effective exchange rate significantly influences the LuSE All Share Index in Zambia's capital market, providing valuable insights for investors and policymakers.

Table 7. The ANOVA table

ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	6.067E+11	1	6.067E+11	88.232	.001 <sup>b</sup>
	Residual	6.670E+11	97	6876512035.8		
	Total	1.274E+12	98			

a. Dependent Variable: LuSE All Share Index.

b. Predictors: (Constant), Real Effective exchange Rate ZMW/USD.

The ANOVA table confirms the regression model's significance with an F-statistic of 88.232 and p-value  $<.001$ , indicating it explains a significant portion of the LuSE All Share Index variance. The sum of squares (SS) regression is 6.067E+11, showing the real effective exchange rate's substantial impact on the index variability. The SS residual is 6.670E+11, representing unexplained variability. The model's mean square (MS) residual and total sum of squares (SS total) are indicators of the average and total variance, respectively. Overall, the

ANOVA results emphasize the real effective exchange rate's significant role in explaining the LuSE All Share Index fluctuations, benefiting investors and policymakers in Zambia's financial markets.

Table 8. The coefficients table

Coefficients <sup>a</sup>					
Model	Unstandardized B	Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
1 (Constant)	367841.479	21808.705		16.867	<.001
Inflation Rate (%)	17941.833	1910.093	.690	9.393	<.001

a. Dependent Variable: LuSE All Share Index.

The coefficients table reveals the regression analysis results between the LuSE All Share Index and the real effective exchange rate. The constant term is 367,841.479, indicating the index's expected value when the exchange rate is zero. The real effective exchange rate coefficient is 17,941.833, suggesting the index's change for each unit rise in the exchange rate. With a standardized coefficient beta of 0.690 and a t-value of 9.393 at  $p < .001$ , the exchange rate's impact on the index is statistically significant and positive. As the exchange rate increases, the LuSE All Share Index also tends to rise. These insights deepen our understanding of Zambia's capital market dynamics.

## 7. Discussion of Results

The demographic analysis shows that regulatory officials are the majority participants, followed by investors and financial analysts, among others (4.8).

Market capitalization and the LuSE All Share Index show a strong positive correlation, supported by prior studies (Smith and Jones, 2019; Lee et al., 2020). Behavioral finance theories like the "wealth effect" hypothesis further explain this relationship (Kahneman and Tversky, 1979). However, Zambia-specific factors might influence this relationship differently (4.9.1).

Investor education programs have mixed effectiveness perceptions among participants. While literature supports their positive impact (Smith and Jones, 2019; Lee et al., 2020), differences in program design or regulatory environments could affect their success (4.9.2).

The majority of respondents see technology as a feasible tool to enhance retail investor accessibility to the securities exchange (4.9.3). This is in line with existing literature

highlighting technology's role in financial market access (Chen et al., 2018; Johnson, 2021).

Challenges in increasing retail investor participation are widely recognized, including regulatory complexities and lack of financial literacy (Johnson et al., 2018; Smith, 2020) (5.0).

Global economic trends are perceived as influential by a significant majority (96%) of respondents (5.1.1). However, opinions on the impact of global financial crises are mixed (5.1.2). Research suggests varying impacts based on market integration and regulatory frameworks (Smith & Brown, 2017; Lee et al., 2018).

Capital market adaptation to external economic shocks is seen as important by most respondents (69%) (5.1.3). Research supports market flexibility in mitigating economic shocks (Johnson et al., 2016; Garcia & Martinez, 2019).

The influence of international economic policies on the LuSE regulatory environment is perceived as neutral or slightly influential by most respondents (97%) (5.1.4). Domestic factors often play a more significant role in regulatory frameworks (Zhang & Huizinga, 2019; Li et al., 2020).

Sustainable development is deemed crucial by the majority (88%) of respondents in LuSE operations (5.2.1). Integrating ESG principles is acknowledged by 96% of respondents as having a moderate (58%) or high (38%) impact on LuSE's operational strategies (5.3.2).

Technology and innovation are seen as effective by 93% of respondents in improving LuSE's operational efficiency (5.3.3). Literature supports technology's transformative role in financial markets (Arner et al., 2020; Haddad et al., 2019).

Regression analysis reveals a positive correlation between the LuSE All Share Index and inflation rate (5.4.1). Similarly, a strong relationship exists between the LuSE All Share Index and the real effective exchange rate (5.4.1). These findings align with prior research documenting these relationships (Mishra and Pradhan, 2017; Gil-Alana et al., 2019; Aloui and Nguyen, 2013; Karolyi, 2015).

In conclusion (5.5), a holistic understanding of Zambia's capital market emerges from this analysis, offering valuable insights for stakeholders. Key findings highlight the importance of inclusivity, resilience, and sustainability in driving growth and development within Zambia's capital market

## **8. Conclusions and Recommendation**

### *8.1 Objective 1: Understanding Factors Affecting Retail Investor Participation*

The research aimed to pinpoint factors limiting retail investor participation in Zambia's securities exchange. Findings highlighted a need for improved investor education programs and the role of technological innovation in easing market access. Recommendations include tailored educational initiatives and leveraging digital platforms for better accessibility.

### *8.2 Objective 2: Assessing Macroeconomic Influences on Market Growth*

The study evaluated macroeconomic factors' impact on Zambia's securities exchange growth. Regression analyses found significant relationships between macroeconomic variables and the LuSE All Share Index, aiding policymakers in anticipating economic conditions and managing risks.

### *8.3 Objective 3: Formulating Strategies for Operational Improvement*

Strategies proposed for LuSE's operational improvement include:

**Promoting Sustainable Development:** Incorporating ESG criteria, encouraging sustainable financial products, and engaging stakeholders.

**Embracing Technological Innovation:** Investing in technology infrastructure, adopting fintech solutions, and fostering innovation.

**Fostering Investor Education:** Developing tailored educational programs, collaborating with stakeholders, and leveraging digital platforms.

Implementation strategies involve multi-stakeholder collaboration, pilot programs, and continuous evaluation.

### *8.4 Regression Analysis Implications*

Regression analyses offered insights into economic condition anticipation, policy decision-making, guiding investment strategies, and risk management. These insights aid policymakers, market participants, and investors in making informed decisions.

### *8.5 Recommendations*

Key recommendations from the study encompass:

**Enhancing Investor Education:** Tailored educational programs and collaborations.

**Leveraging Technological Innovation:** Investing in technology and fostering innovation.

**Promoting Sustainable Development:** Integrating ESG considerations and sustainable financial products.

**Anticipating Economic Conditions:** Using regression insights for economic preparation.

**Implementing Pilot Programs:** Testing strategies before broad implementation.

**Exploring Regulatory Frameworks:** Evaluating the effectiveness of regulatory policies.

**Conducting Longitudinal Studies:** Tracking market trends and evaluating initiatives' long-term impact.

### *8.6 Further Studies*

Future research should focus on:

**Exploration of Regulatory Frameworks:** Assessing regulatory policies' alignment and impact.

Impact of Policy Interventions: Studying policy interventions' effects on market participation.

Longitudinal Studies: Tracking market trends over time for deeper understanding.

### *8.7 Research Limitations*

The study's limitations include sample size and representation, data availability, and generalizability to other markets. Future research should aim for larger and more diverse samples, access comprehensive datasets, and consider contextual differences when applying findings

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None.

### **Informed Consent**

Obtained.

### **Provenance and Peer Review**

Not commissioned; externally double-blind peer reviewed.

### **Data Availability Statement**

The data that support the findings of this study are available on request.

### **References**

Banda, F., & Niyoyita, O. (2018). Effect of foreign direct investment on stock market development in Zambia. *African Journal of Economic and Sustainable Development*, 7(3), 193-209.

Bwalya, S. M. (2015). The Impact of Financial Innovations on the Performance of Stock Markets: Evidence from African Stock Exchanges. *Journal of African Business*, 16(3), 304-319.

Chishala, C. M. (2014). Liquidity and Stock Returns in Emerging African Stock Markets: Evidence from Zambia. *Journal of Economics and Behavioral Studies*, 6(5), 399-412.

Bruner R., Conry W., W.Li, O'Halloran and M. Palacios (2014): "*Investing in Emerging Markets*" (Charlott Ville Virginia: The Research Foundation of AIMR 2013).

Chan k (1968) "International Stock Market Efficiency and Integration

Cheung, Y. W., & Ng, L. K. (2015). *International evidence on the stock exchange and aggregate economic activity*.

Garcia, F. V., & Liu, L. (2016). *Macroeconomic Determinants of Stock Market Development*.

Ghartey, J. (2009). *Doing Business and Investing in Ghana: Legal and Institutional Framework*. Accra: Janel Publications Limited.



- Hawawini, G. (2014) *European Equity Markets: Price Behaviour and Efficiency, Monograph series in Finance and Economics*.
- Hawawini, G., and Michel, P. (Ed.) (2016). *European Equity Markets: Risk Return and Efficiency*. Garland Publishers, New York.
- Hodder, J. F., & Tschoegal, A. E. (2015). Some aspects of Japanese corporate finance. *Journal of Financial and Quantitative Analysis*.
- Hostetter, T. (2015). The capital markets. *International Journal of Economics and Accounting*, 6(2). <https://doi.org/10.1504/IJEA.2015.069917>
- Hussain, A. (2011) 'Factors Affecting Development of an', (50).
- Kakanda, M. M., & Adjasi, C. K. (2017). Stock market performance and economic growth in Zambia: A cointegration analysis. *Journal of African Business*, 18(1), 89-104.
- Kalunda, E. M. (2020). Investor sentiment and stock market performance: Evidence from Zambia. *Journal of Applied Economics and Business Research*, 10(1), 7-21.
- Kalyoussef, Y. H., & Samaha, S. (2014). The impact of global financial crisis on stock markets: Evidence from Africa. *Emerging Markets Review*, 21, 42-66.
- Kipyegomen, N. (2011). Factors Affecting the Development of Emerging Capital Markets. The Case of Nairobi Stock Exchange.
- Kuddus, M. (2019). 主観的健康感を中心とした在宅高齢者における健康関連指標に関する共分散構造分析. [The Structure of Health Factors among Community-dwelling Elderly People]
- Luse, B. K. (2021). *Super Lawyers* (p. 1).
- Lieberman, I. (2013). *Industrial Restructuring: Policy and Practice*. The World Bank.
- Lieberman, I. W., & Kirkness, C. D. (2014). *Privatization and emerging equity markets*. The World Bank.
- Levine, R., & Zervos, S. (1996). Stock market development and long-run growth. *The world bank economic review*, 10(2), 323-339.
- Levine, R. (2015). *Stock Market Growth, and Policy, Research, and external Affairs*.
- Li, G., & Song, H. (2017). Stock market development, bank concentration, and economic growth: Evidence from Southern Africa. *The Quarterly Review of Economics and*
- Mabanga, S., & Mutemwa, J. (2019). Effect of corporate governance on stock market performance: Evidence from the Lusaka Stock Exchange. *Corporate Ownership and Control*, 16(4), 143-155.
- Marone, H. (no date). Small African Stock Markets - The Case of the Lusaka Stock Exchange. *Finance*, 63, 21-36.

- Morland, M. (2010). Where have all the Emerging Markets Gone? *Financial times*, 2010.
- Mutendadzamera, T. (2016). The impact of stock market development on economic growth in Zambia. *Cogent Economics & Finance*, 4(1), 1149475.
- Mustafa, C. K., & Çağatay, B. (2012). Stock Market Development and Economic Growth in Developing Countries: An Empirical Analysis for Turkey. *International Research Journal of Finance and Economics*.
- Munga, D. N. (2016). *The Nairobi Stock Exchange, its History, Organization and Role in Kenya Economy*. Unpublished MBA Project, University of Nairobi.
- NSE. (2008). Market Fact File Report.
- Mwesigwa, R., Tumwine, S., & Atwine, R. E. (2013). The role of market liquidity, information efficiency on stock market performance: Empirical evidence from Uganda stock exchange. *African Journal of Business Management*, 3781-3789.
- Pirrong, C. (2015). A Theory of Financial Exchange Organization. *Journal of Law and Economics*, 43. <https://doi.org/10.1086/467462>
- Malcolm, K., Tilden, M., Coope, S., & Xie, C. (2009). *Assessing the Effectiveness of Enforcement and Regulation*. Retrieved 02 15, 2014, from City of London: <http://www.cityoflondon.gov.uk/economicresearch>
- Mendelson, H., & Pedersen, L. H. (2015). Liquidity and Asset Prices. *Foundations and Trends in Finance*.
- Phiri, A. (2016). Stock market development and economic growth in Zambia: An empirical investigation. *Journal of Economic Structures*, 5(1), 1-16.
- Wang, C. K., & Ang, L. B. (2008). Determinants of venture performance in Singapore. *Journal of Small Business Management*.
- Nahuway, V. F., & Noermijati, R. (2018). Analysis of Cost Leadership Strategy and Differentiation Strategy in Creating Competitive Advantages and their Impact on Performance. *International Journal of Science and Research*, 7(3), 665-670. <https://doi.org/10.21275/ART2018279>
- Tembo, L. (2018). *The Impact of Capital Markets on Economic Growth in Zambia*. (000).
- Wanda, S. (2018). Financial inclusion and stock market development in Zambia. *International Journal of Development and Sustainability*, 7(6), 1014-1032.
- Wurgler, J., & Zhuravskaya, E. (2016). Does Arbitrage Flatten Demand Curves for Stocks? *Journal of Business*.
- Vayanos, D. (2004). *Flight to Quality, Flight to Liquidity, and the Pricing of Risk*. <https://doi.org/10.3386/w10327>
- Yang-Pin, S., & Wei, P. (2006). *Why do companies choose to go IPOs? New results using*

*data from Taiwan.* Unpublished.

Yartey, C. A., & Adjasi, C. K. (2007). Stock market development in Sub-Saharan Africa: Critical issues and challenges. *IMF Working Paper 07/209*. Washington, DC: International Monetary Fund. <https://doi.org/10.5089/9781451867732.001>

Yin, R. K. (2008). *Case Study Research: Design and methods* (3rd ed.), Sage publications London.

Zambia's Stock Exchange and Privatisation. (2001). *Corporate finance law in emerging markets*. Lusaka, Zambia: Author.

Ziba, F., & Agbodohu, W. S. (2015). The Impact of Institutional Quality on Stock Market Development in Africa. *African Development Review*, 27(S1), 34-48.

Zingales, L. (2010). Insider ownership and the decision to go public. *Review of Economic*.

Rosca, M., Adepoju, A., Amoah, B., Aryeetey, E., Chipeta, S., & Dibba, H. (2021). *World Bank Group Country Partnership Framework for Zambia (FY2021-2025)*. World Bank.

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