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A Study of the Factors Affecting the Growth of Building Societies in Zambia: A Case Study of Building Societies, Banks and Micro-Finance Institutions in Lusaka

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Abstract

This study examines the factors that affect the growth of building societies with regards to the housing deficit, in Zambia. It focuses on the influence of regulatory requirements, socio-economic factors, environmental considerations and operational requirements. The goal is to gain an understanding of how these financial institutions develop over time. Through a regression approach, the study examines the relationships between independent variables (regulatory, socio-economic, environmental and operational factors) and the growth of building societies. The research is based on quantitative data collected from 53 participants from building societies in Zambia. The findings reveal a significant and positive relationship between regulatory requirements and building society growth. Socio-economic factors demonstrate varying degrees of significance, environmental factors exhibit limited impact, and operational requirements display a weak relation-ship with growth. The study highlights the role of frameworks, the multifaceted influence of socio-economic dynamics, the secondary importance of environmental factors and the significance of operational excellence. In conclusion, this research provides insights into the dynamics that drive building society growth in Zambia. Policymakers are advised to strengthen frameworks to consider socio intricacies carefully and prioritize operational efficiency. The implications extend to promoting inclusion, stability and growth, in Zambia's evolving landscape.

Keywords

Building Societies, Regulatory Requirements, Socio-Economic Factors, Environmental Factors, Operational Requirements, Financial Inclusion, Zambia

1. Introduction

Building Societies can be traced back to the late 18th century in the Midlands of England and have maintained a singular social objective which is to facilitate improved housing, primarily through homeownership (Casu, 2015). In the contemporary landscape, building societies continue to provide competitive services while preserving their mutual identity as financial institutions. Governed by the Building Societies Acts globally, their primary purpose involves making property-secured loans, predominantly funded by members' deposits.

Mususa et al. (2013) note that building societies constitute over 30% of the mortgage market and 45% of household savings, emphasizing their mutual ownership structure aimed at maximizing benefits for members. Renowned for good customer service, building societies play a crucial role in fostering diversity and competition in the financial services sector, especially in countries like the UK.

Additionally, Weiss and Jones (2017) observe a shift where banks now emulate building societies by offering home finance products, contributing to the growth of the mortgage industry. In Sub-Saharan African countries like Kenya and South Africa, specific rules enforce the intended functions of building societies in deposit-taking and intermediation, focusing on housing construction and purchase (Makori, 2015).

Furthermore, Juma (2012) highlights the exponential growth of the Kenyan mortgage market, attributing it to modern home finance products from banks and building societies. However, challenges persist, such as the modest size of the mortgage market by global standards. Chiaramonte et al. (2015), postulated that mutual financial institutions contributed positively to financial stability whereas, Tatjana (2011) underscored the crucial role of building societies in the United States' mortgage sector, enhancing the efficiency of the financial industry.

In Zambia, the Building Societies Act of 1968 (Amended in 1970) forms the legal framework for the building societies sector. The act outlines establishment, registration, authority, responsibilities, and dissolution procedures. Zambia National Building Society (ZNBS), the pioneer mortgage firm, has played a pivotal role in the country's housing sector evolution. Notable building societies like ZNBS, CFHHZ, Finance Building Society, and Zambia Home Loans contribute significantly to housing finance, aiming to increase the country's housing stock.

Despite growth, challenges persist, necessitating a comprehensive understanding of the factors influencing the building societies sector. The study focuses on regulatory, socio-economic, environmental, and operational factors to unravel the dynamics affecting growth. The remaining of the study is structured as follows: Section 1 provides an insight to the problem statement and what the study aims to address. Section 2 provides a literature review, discussing the historical development of building societies, their role in the financial services sector, and

previous research on factors influencing their growth. Section 3 outlines the research methodology, including data collection procedures, variables examined, and statistical analysis techniques employed. Section 4 presents the empirical findings, analyzing the relationships between regulatory, socio-economic, environmental, and operational factors and building society growth. Section 5 discusses the implications of the findings and provides recommendations for policymakers, regulators, and building society stakeholders. Finally, Section 6 concludes the study, summarizing key findings and suggesting avenues for future research.

Zambia faces significant urbanization, especially in Lusaka and the Copperbelt towns. With a predicted population of 18.38 million in 2021 and a 2.93% annual growth rate, 40% live in metropolitan areas, with 70% in informal settlements facing social, economic, and environmental challenges. Critical infrastructure financing is challenging, leading to a housing shortfall of 1.5 million units, expected to reach three million by 2030 (Cooperative Housing International, 2021; UN-Habitat. Zambia Overview, 2012-2021).

Despite government and sector efforts to address the housing deficit, policies lack clear objectives, hindered by high land prices and costly materials. The housing policy lacks a proper implementation strategy, impacting decent housing delivery. Building societies struggle with market and sector penetration arising from rising costs, customers not having adequate finances to qualify for facilities, and a need for digital transformation.

While Sustainable Development Goal (SDG) 11 aims for inclusive, safe, and sustainable cities by 2030, Zambian financial institutions lag in offering affordable mortgage solutions. The housing sector faces difficulties due to inadequate strategies, with a housing stock of 2,500,000 units and an annual production of 73,000 units, creating a shortfall of 1,539,000 units in 2014.

Zambia's financial sector reforms since 1992 aimed for improved access, but practical outcomes differ. Bank takeovers due to insolvency highlight challenges. The building society sector, once robust, now has only one state-owned entity. Additionally, Building Societies had a market share of 5% by count and 10% - 15% by portfolio value compared banks at 75% - 90% market share by portfolio value (ZNBS, 2023; Bank of Zambia, 2023). This study investigates factors influencing the building society sector's strengths and weaknesses in providing housing financial services, aiming to enhance living standards for Zambians.

2. Literature Review

2.1. Overview of Building Societies

Samy (2008) described building societies as financial institutions owned by members and regulated as mutual organizations. Casu and Gall (2016) emphasized their role in accumulating resources through member savings to fund affordable mortgages. The distinction from commercial banks lies in the owner-

ship structure and conservative investment approach (Kagan, 2021). However, the aftermath of the 2008 global financial crisis led to a decline in the number of building societies, with mergers, demutualization, and some closures (Kagan, 2021).

Martin & Sevillano (2011) highlighted the blurring lines between stakeholder-based and commercial banks, focusing on their differing objectives. Building societies' commitment to long-term social and financial goals is termed a "double-bottom" line, distinguishing them from profit-centric commercial banks.

2.2. Dynamics in the UK Building Society Sector

Equally, the British Bankers Association (2013) asserts that building societies in the U.K. have substantially grown and fully adopted the modern market concept. They demonstrate that building societies continue to leverage mutual benefits, regionality, and technology to create customer value and differentiation in the European Financial Services market.

2.3. Housing Finance

Housing finance is essential for infrastructure development (Law Insider, 2022). The Washington State Department of Financial Institutions (2022) also outlined prerequisites for housing finance and emphasized the role of financial institutions like building societies in housing finance provision. The critical role of housing finance is shaping a country's housing system, financial stability, and economic development (Bah et al., 2018).

2.4. The Building Society Industry in Zambia

The World Bank's International Finance Corporation's Report (2017) outlined the regulatory framework for building societies in Zambia. The sector, governed by the Building Societies Act and supervised by the Bank of Zambia, currently comprises 2 key players; ZNBS and LOLC Finance Zambia. The rate of growth of building societies in Zambia indicates limited expansion compared to microfinance and commercial banks (Bank of Zambia). Despite challenges, ZNBS has exhibited positive performance, recording substantial growth in assets, revenue, and mortgage portfolios (ZNBS, 2020). Challenges such as shortages in housing, demand for housing finance, and regulatory changes have prompted amendments to the Building Societies Act.

2.5. Financial Risks and Regulations in the Building Society Sector

The growth and stability of building societies are inherently tied to their ability to manage financial risks effectively and one prominent risk is interest rate risk (Milani, 2012). Fluctuations in interest rates can impact the profitability of mortgage and home finance products offered by building societies.

Milani (2012), also found that factors such as a borrower's financial status and disposable income, quality of security provided, and changes in property values can contribute to business risks. On the other hand, Nigmonov et al. (2022) emphasized macroeconomic factors, stating that inflation and interest rates significantly affect loan delinquency rates. Inflationary pressures can lead to currency instability, hindering access to long-term finance for mortgages and other home finance products. The level of competition between banks, market viability, credit and interest rate risk, and information asymmetries also play roles in affecting the growth of building societies, according to Milani (2012).

2.6. Regulatory Environment

Casu (2015) and Michie and Llewellyn (2010) asserted that the intense regulatory pressure on building societies, particularly in the aftermath of the financial crisis highlighting that Building Society Act 1986 in Britain and subsequent Vickers' reforms imposed significant operational changes on financial institutions, including building societies. Regulatory frameworks like these aim to enhance the stability and resilience of the financial sector but may also pose challenges for building societies.

While Casu (2015) pointed out the regulatory impact on Return on Equity (ROE) and Return on Assets (ROA), Michie and Llewellyn (2010) argued that securing a financial return for failed mutual organizations requires fair taxation and regulatory frameworks. The dichotomy between regulatory pressures and the need for financial sustainability is a recurrent theme in the literature, as highlighted by various studies.

Further, Guma (2012) investigated the factors influencing mortgage financing in Kenya, and found that laws and institutions created to stimulate housing financial development can impact mortgage financing. He found that clear regulatory guidance was essential for minimizing mortgage lending risks and ensuring the growth of mortgage financing.

2.7. Legal Framework

Li et al. (2021) in his study stressed the necessity of a legislative framework that facilitates smooth property transactions and foreclosures for an efficient market. He found that deficiencies in land information management, particularly insecure land titles, increased the risk associated with mortgage lending, thereby reducing the granting of mortgage loans. Whereas, Makori (2015) contended that building societies in the Euro region had accelerated growth due to government subsidies for owner-occupied housing, especially with mortgage financing. This interplay between legal and fiscal elements underscored the need for a nuanced legal environment to foster building society growth.

2.8. Political Environment

Where the political environment is concerned, Petra and Lyons (2018) hig-

hlighted the impact of the political environment on building societies and suggested that political factors influenced the development of financial institutions, with legal influences considered of secondary importance. They also found that those in power shape institutions to maintain power, potentially compromising the growth of building societies. A decentralized political system is proposed as a more conducive environment for building societies.

2.9. Capital and Funding Requirements

Martin & Sevillano (2011) postulated that stake-holder institutions face challenges maintaining traditional funding sources based on retail deposits. Building societies, especially in the U.K., face legislative limits on lending and funding activities, known as "nature limits." These restrictions, such as the requirement to have at least 75% of trading assets as loans secured on residential property, contribute to a distinctive identity for building societies but limit their flexibility. Unlike commercial banks, building societies cannot readily raise external capital, making them more risk-averse and conservative. Ayadi et al. (2009) added that this characteristic contributes to the overall stability of the financial sector but poses challenges for expansion due to limited capital. The capital and funding challenges highlight the need for regulatory flexibility to enhance building societies' resilience and growth.

2.10. Employment/Income Status

Milani (2012) establishes the link between the employment status of clients/members and mortgage growth in building societies. Housing finance systems, especially in developing countries, face challenges due to income inequality and macroeconomic instability. While house prices increase, household income may not follow suit, creating hurdles for mortgage financing. Coccorese & Shaffer (2018) demonstrate the positive impact of cooperative banks on local economic development, emphasizing the role of building societies in addressing economic disparities.

2.11. Environmental and Social Risks

Olawumi et al. (2019) highlighted that environmental risks associated with financing residential properties, including site contamination, seismic activity, and compliance with environmental standards necessitated proactive identification, assessment, and management to ensure the sustainability of building societies.

Makori (2015) underscored the significance of the direct credit system as a major component of the housing finance system. Commercial banks, finance companies, and public sector organizations provide housing loans, and central banks regulate and certify these institutions to offer a wide array of home finance products.

Building on previous studies, the literature review highlights several lessons

for building societies. Stephens (2001) points out factors such as growth by acquisition, members' revolt, and the need to maintain operational independence that can impact building society growth. Groeneveld and Bouke de Vries (2009) suggest that, given a good operational environment, cooperative banks, including building societies, can contribute positively to economic growth and financial system stability.

Chiaramonte et al. (2015) reinforce the idea that cooperative financial institutions, including building societies, exhibit stability even during crisis years. The lessons learned underscore the need for building societies to navigate challenges effectively and maintain stability even in turbulent economic conditions.

While existing studies provided valuable insights certain gaps and limitations were highlighted. Casu's (2015) examination of unbalanced regulations lacked specificity regarding the exact regulations hindering the implementation of housing policy frameworks. Moreover, studies conducted in the U.K. and other OECD countries may not fully capture the nuances of the Zambian economic and political context.

At the end of our literature review, it's evident that there are gaps and conflicting findings in the existing research, particularly concerning the specific challenges faced by building societies. Each study highlights different factors that affect how building societies operate. For example, Casu (2015) alludes that regulatory imbalances hinder building society growth, while Makori (2015) and Milani (2012) underscore that credit systems are a major component towards growth and that the employment status of clients has an impact on growth, respectively. Similarly, the findings for Stephens (2001) point to members' revolt and the need for operational independence whereas, Petra and Lyons (2018) found that the political environment had a major impact on growth. While these studies from other countries offer valuable insights, they may not fully capture the unique socio-economic, political, and regulatory context of Zambia. Our study aims to address these gaps by focusing on the factors influencing the growth of building societies in Zambia. By examining regulatory, socio-economic, environmental, and operational aspects, we aim to provide practical insights for investors, policymakers and regulators.

3. Theoretical Framework

3.1. Loanable Funds Theory of Interest Rate

This study was firmly grounded on the loanable funds theory of interest rate, positing that economic agents make decisions about allocating financial wealth among interest-earning assets, cash, or a combination (Wickens, 2008). The theory assumes perfect competition in financial markets and asserts that interest rates function as the price for the right to borrow or use loanable funds. Given the centrality of investment, particularly in viable projects like home building and finance, the study narrowed its focus to the demand for loanable funds driven by

investment motives, sidelining hoarding and dissaving considerations. The theory identified three purposes for the demand for loanable funds: investment, hoarding, and dissaving with emphasis on investment. Financial institutions, including building societies, emerge as key players in providing loanable funds for housing investments, underlining their significance in the overall framework. The study introduces the equilibrium condition in the loanable funds market, represented by the equation;

$$S + \Delta M = \Delta H + I .$$

where, (S) is Savings Flow, (ΔM) is new money created by banks, (ΔH) denotes fluctuations in cash holdings, and (I) signifies Investment Flow. The theory establishes an inverse relationship between the demand for loanable funds for investment and the rate of interest. This dynamic extends to the relationship between the interest rate and the growth of the housing sector, ultimately influencing the growth trajectory of building societies (Bertocco, 2007; Wickens, 2008).

3.2. Theory of Risk Return

Aligned with Begum's (2012) characterization, investment risk is delineated as the anticipated variability in future cash flows. This variability, stemming from the inherent challenge of accurate forecasts, serves as a key indicator of risk, with heightened variability signaling increased risk. The study placed primary emphasis on risk and diversification when evaluating the performance of building societies, Micro-finance Institutions (MFIs), and banks. Shareholders navigate the delicate balance between maximizing expected profits and minimizing costs, encapsulated in the speculative motive.

Abstracting from speculative motives, shareholders are presumed indifferent to profit distribution, receiving returns through increased entity share prices or dividends (Kopp & Capinski, 2015). Financial investors anticipate growth over time, seeking to maximize returns within a fixed period. The study posits that if financial institutions share similar risk-return preferences or if this relationship follows a simple, homogeneous, and continuous function, managing entities' risk becomes more predictable, rendering the growth trajectory of building societies more controllable. Calem and Rob's (1996) perspective underscores the link between a financial institution nearing the regulatory minimum capital ratio and its strategic move to bolster capital and mitigate risk. This approach aims to circumvent regulatory costs tied to breaching capital requirements, influencing the growth dynamics of building societies. The study highlights a pivotal challenge for building societies with shaky foundations or inadequate capitalization. Such institutions may be inclined to take greater risks, coined as "gambling for resurrection" (Calem & Rob, 1996), envisioning higher expected returns to augment their capital.

3.3. Principal-Agent Theory

Initially proposed by Ross and Mitnick and expanded in the 1980s by Fama and

Jensen, the theory examined information asymmetry in principal-agent relationships, prevalent in credit relationships within home finance products and interactions between building societies and their members/clients. Credit relationships, inherent in home finance products, often exhibit characteristics of agency problems. Borrowers, as agents, act on behalf of lenders (principals), introducing information asymmetry where one party possesses privileged information. In the context of lender-borrower relationships, principals may struggle to monitor agents' actions or discern their types, necessitating investments to identify agent types or induce actions aligned with the lender's interests. To address the principal-agent problem, institutions use collateral as a crucial aspect of loan contracts.

3.4. Regulation Theory

The Regulation Theory, initially formulated by Arthur Cecil Pigou in 1932, posits that economic regulation is imperative to rectify inequitable market practices. This theory asserts that regulation is a response to public demand, aiming to serve the broader societal interest rather than specific vested interests (Goodwin, 2001; Levy & Spiller, 1994; Newbery, 1999). According to this theory, the regulatory authority is envisioned as representing the general welfare of the society within which it operates, prioritizing the collective interest over the private concerns of regulators (Goodwin, 2001; Levy & Spiller, 1994; Newbery, 1999). The case for economic regulation is rooted in the identification of significant market failures. These failures often stem from economies of scale and scope in production, information imperfections related to externalities, market transactions, and the existence of incomplete markets. In the context of developing countries, market imperfections may be more pronounced, strengthening the case for public regulation (Stiglitz, 1998). In the pursuit of rendering housing affordable for middle and low-income groups, government regulation becomes indispensable. Imperfections in mortgage markets, externalities, and challenges arising from income inequality, information asymmetry, and wealth distribution effects underscore the necessity of regulatory intervention (Stiglitz, 1998).

4. Research Methodology

4.1. Research Design

The study adopted a mixed-method research design approach incorporating paradigms of descriptive research design and explanatory research design. Descriptive research design was incorporated as it posited the methods which involve the collecting of raw data from members of a target population. This allowed the researcher to collect data from the building societies, banks and MFIs concerning the factors hindering the efficient implementation of housing policy framework in Zambia and the extent to which other financial institutions have incorporated housing finance in their products delivery.

The explanatory research design, on the other hand, is a technique for exploring phenomena that have never been examined or properly explained, according to Hagan (2000). This allowed the researcher to gain a broad understanding of the cause-and-effect relationships between the identified factors and the growth of the building societies in Zambia.

4.2. Population of the Study

As of 2022, Lusaka had fewer than 100 registered financial institutions offering the home finance products that fall in the category of MFIs, building societies and banks. Thus, the study considered a total of 12 financial institutions. Limiting the site to Lusaka where central administrative offices were located ensured relevance to the study's objectives.

4.3. Sample and Sampling Procedure

The study employed both probability (Simple Random Sampling, Cluster Sampling) and non-probability (Purposive Sampling) techniques which supported the study's exploratory nature. This approach acknowledged the need for representative samples while considering specific criteria for inclusion. Determining the sample size through the Rao Soft technique ensured statistical reliability[1]. The Rao Soft online calculator recommended a minimum sample size of 53 respondents which were extracted from three clusters of financial institutions: 2 building societies, 5 banks and 5 MFIs.

4.4. Data Collection

The researcher utilized both primary (survey administration, interviews, observations) and secondary (online sources) data collection methods. A self-administered questionnaire, incorporating closed-ended questions, served as the primary data collection tool were sent through digital platform and a total of 103 questionnaires were sent out to 12 Financial institutions (5 Banks, 5MFIs and 2 Building Societies). A total of 53 questionnaires were responded to representing a 51.5% response rate. Secondary data collection tools included online sources such as, Google Scholar, Research Gate, JSTOR, the Financial Institutions' web sites, the Bank of Zambia website, Zambia Statistics Agency and the University of Zambia's catalogues, among others.

4.5. Data Analysis

Manual SPSS for quantitative analysis aligned with the study's mixed-methods approach was employed. Descriptive statistics and ANOVA were also utilized for a comprehensive examination of data and to test the relationship between the independent and dependent variables.

[1]The sample size determination process utilized the Rao Soft sampling size technique. Based on a margin of error of 9.78% and a confidence level of 90.22%, the Rao Soft online calculator recommended a minimum sample size of 53 respondents from a population of 200.

4.6. Model Specification

In the examination of the factors influencing the expansion of building societies within Zambia, our research employs an intricate panel regression model complemented by Granger causality tests. This methodological approach is designed to dissect the interplay and predictive dynamics between the growth metrics of building societies and a constellation of independent variables, encapsulated within regulatory, socio-economic, environmental, and operational domains.

4.7. Model Specification

Our analytical model is articulated as follows, with the intent to show the multifaceted impact of diverse determinants on building society proliferation:

$$\text{Growth}_{\text{BS}} = \beta_0 + \beta_1 \text{REG} + \beta_2 \text{SECO} + \beta_3 \text{ENV} + \beta_4 \text{OPR} + \epsilon \tag{1}$$

within this framework:

$\text{Growth}_{\text{BS}}$ delineates the growth trajectory of building societies, quantified through metrics such as asset growth, membership expansion, augmentation of the loan portfolio, and profitability enhancements.

β_0 serves as the constant term, establishing the foundational growth rate of building societies in the absence of variability in the independent variables.

REG encompasses a suite of regulatory influences, spanning compliance costs, frequency and nature of regulatory amendments, accessibility to regulatory guidance, and the legislative impact emanating from specific statutes.

SECO aggregates socio-economic contributors, including GDP per capita, urbanization trends, employment statistics, and household savings rates.

ENV captures environmental considerations, from the availability of land earmarked for housing to the ramifications of environmental mandates and the exposure to climate-related risks.

OPR amalgamates operational elements, from efficiency metrics and technological integration to innovation in product offerings and customer satisfaction indices.

ϵ represents the error term, encapsulating the variance in building society growth not accounted for by the model's independent variables.

Granger Causality Tests

To further probe into the causative linkages between these determinants and the growth phenomena of building societies, Granger causality tests are instituted as follows:

$$\begin{aligned}\text{Growth}_{\text{BS}_t} = {} & \sum_{j=1}^{n} \propto_j \text{Growth}_{\text{BS}_{t-j}} + \sum_{j=1}^{n} \beta_{1j} \text{REG}_{t-j} + \sum_{j=1}^{n} \beta_{2j} \text{SECO}_{t-j} \\ & + \sum_{j=1}^{n} \beta_{3j} \text{ENV}_{t-j} + \sum_{j=1}^{n} \beta_{4j} \text{OPR}_{t-j} + \epsilon_{1t}\end{aligned} \tag{2}$$

$$X_t = \sum_{j=1}^{n} \gamma_j X_{t-j} + \sum_{j=1}^{n} \delta_j \text{Growth}_{\text{BS}_{t-j}} + \epsilon_{2t} \tag{3}$$

In this schema:

X symbolizes the series of independent variables (REG, SECO, ENV, OPR), each scrutinized within discrete models.

$\propto_j$, β_{1j}, γ_j, δ_j are the coefficients poised for estimation, linked to the lagged values of building society growth and the independent variables.

n indicates the count of lags incorporated into the analysis.

ϵ_{1t}, ϵ_{2t} denote the error terms pertinent to each equation.

This analytical structure posits that if the coefficients β_{1j} associated with the lagged values of the independent variables in Equation (2) are collectively significant, it implies these factors as Granger-causal to the growth of building societies. Conversely, significant δ_j coefficients in Equation (3) would suggest that the growth of building societies Granger-causes alterations in those variables. The presence of bidirectional causality is inferred if both sets of coefficients exhibit significant deviations from zero. Absence of significance in these coefficients implies independence between the variables in the Granger-causal framework.

4.8. Main Hypotheses

$H_1$0: Regulatory requirements do not have a positive relationship with building society growth in Zambia

H_1a: Regulatory requirements have a positive relationship with building society growth in Zambia

$H_2$0: Social economic factors do not have a positive relationship with building society growth in Zambia

H_2a: Social economic factors have a positive relationship with building society growth in Zambia

$H_3$0: Environment factors do not have a positive relationship with building society growth in Zambia

H_3a: Environment factors have a positive relationship with building society growth in Zambia

$H_4$0: Operational requirements do not have a positive relationship with building society growth in Zambia

H_4a: Operational requirements have a positive relationship with building society growth in Zambia

5. Research Results and Analysis

5.1. Demographic Analysis

The study's participants represent a diverse cross-section of Zambia's financial industry, offering a range of perspectives. They span a wide age range, from 25 to 64 years old, with a concentration in the 25 - 34 and 35 - 44 age brackets, indicating a mix of experienced professionals and mid-career individuals. Specifically, 30% of respondents fall within the 25 - 34 age group, while 25% fall within the 35 - 44 age group. Gender distribution is balanced between male and female

respondents, with 50% male and 50% female, suggesting gender equality within the sector. Education levels are predominantly high, with most participants holding at least a Bachelor's degree (45%), and some possessing advanced degrees such as Master's (30%). Job positions cover the organizational hierarchy, from Junior Staff to Executive/Leadership roles, showcasing a broad spectrum of industry insights. Specifically, 20% of respondents hold Junior Staff positions, while 15% are in Executive/Leadership roles. Work experience varies significantly, ranging from less than 1 year to over a decade, indicating a diverse mix of seasoned professionals and newcomers. Specifically, 35% of respondents have 4 - 7 years of work experience, while 20% have more than 10 years of experience. Participants represent different types of financial institutions, including Banks (40%), Micro-Finance Institutions (MFIs) (30%), and Building Societies (30%), reflecting the sector's diversity. They work across various departments such as Credit, Sales, Marketing, and Business Development, highlighting their functional expertise. Geographically, participants' institutions are located across Lusaka, encompassing the Central Business District (40%), suburbs (30%), and other areas (30%), ensuring comprehensive coverage of the city's financial landscape. The majority of participants are employed full-time, underscoring their commitment to their roles and indicating a high level of engagement with the research topic.

5.2. Preliminary Statistical Analysis

The preliminary statistical analysis conducted aimed to investigate the relationships among different variables and their impact on the growth of building societies, banks, and micro-finance institutions (MFIs) in Lusaka, Zambia. This analysis was performed using data collected from 53 respondents working within these financial institutions. The statistical analysis incorporated Pearson correlation analysis in order to understand the direction and strength of relationships among the variables. Furthermore, Cohen's criteria was employed to evaluate the practical significance of the relationships, categorizing effect sizes as small, medium, or large. According to Cohen (1988), a small effect size ranges from 0.10 to 0.29, a medium effect size ranges from 0.30 to 0.49, and a large effect size ranges from 0.50 to 1.00.

Table 1 below provided a comprehensive view of the correlations among various variables concerning the growth of building societies as the outcome variable. The average age of respondents indicated a relatively diverse age range among the 53 participants which suggested that individuals from different age groups are represented in the study.

Gender indicated a mean of 1.4906 and a standard deviation of 0.50469 a relatively even distribution of gender among the participants. However, the positive correlation coefficient of 0.504** between gender and the growth of building societies may imply that there may be a tendency for individuals of a particular gender to perceive higher levels of growth in building societies.

Table 1. Correlations among all variables with growth of building societies as an outcome variable.

				Correlations												
Variable	Mean	Std Deviation	N	1	2	3	4	5	6	7	8	9	10	11	12	13
Age	2.9057	1.24444	53													
Gender	1.4906	0.50469	53	0.504**												
Highest Level of Education	2.6792	1.03354	53	0.579*	0.905*											
Job Position	3.0189	1.61115	53	0.592**	0.885**	0.913**										
Work Experience	3.5849	1.36486	53	−0.075	0.033	−0.059	−0.092									
Type of Financial Institution	1.9057	0.79091	53	0.182	−0.191	−0.144	−0.208	−0.252								
Department	2.5094	1.20292	53	0.740**	0.655**	0.702**	−0.717*	0.057	0.297*							
Location of Institution	1.4340	0.50036	53	−0.027	−0.196	−0.168	−0.298*	0.078	0.011	0.006						
Employment Status	1.1698	0.57965	53	−0.046	0.151	0.203	0.228	−0.343*	−0.014	−0.246	−0.084					
Regulatory Requirements	3.0660	1.21603	53	−0.075	0.125	0.187	0.191	−0.305*	−0.030	−0.246	−0.025	−0.084				
Environmental Factors	3.0991	1.17704	53	−0.041	0.127	0.157	0.199	−0.340*	−0.028	−0.221	−0.074	−0.025	0.974*			
Operational Requirements	3.0613	1.24798	53	−0.047	0.134	0.184	0.190	−0.327*	0.046	−0.210	−0.027	−0.074	0.979*	0.971**		
Social-Economic Requirements	3.0283	1.21554	53	−0.047	0.144	0.180	0.208	−0.303*	−0.046	−0.263	−0.081	−0.027	0.982*	0.977**	0.979**	
Growth Of Building Society	3.0991	1.28353	53	0.057	0.301	0.199	−0.320	−0.263	0.005	0.091	0.085	−0.081	0.974**	0.970**	0.973**	0.956**

Source: Authors, 2023.

Highest Level of Education recorded a mean of 2.6792 and a standard deviation of 1.03354 which indicated a varied educational background among the respondents while the positive correlations of 0.579** and 0.905** with growth of building societies suggested that individuals with higher levels of education may contribute positively to the perceived growth.

Job positions among participants showed a diverse distribution of roles with positive correlations of 0.592**, 0.885**, and 0.913** which indicated that those in higher-ranking positions may have a significant impact on the perceived growth of building societies.

Work experience, with an average of 3.5849 and a standard deviation of 1.36486, suggested a wide range of experience levels while the negative correlations of −0.075, −0.059, and −0.092 with growth of building societies imply that work experience may not strongly contribute to fostering growth.

The variable "Type of Financial Institution," with a mean of 1.9057 and a standard deviation of 0.79091, primarily pointed to a prevalence of banks. How-

ever, the correlations of 0.182, −0.191, −0.144, −0.208, and −0.252 did not show substantial associations with the growth of building societies.

The location of institutions exhibited significant variability and a strong positive correlation of 0.078 with growth of building societies suggests that the geographical placement of an institution may be a critical factor contributing to growth. The average employment status also suggested a predominant presence of full-time employment among respondents.

The variable "REGULATORY REQUIREMENTS" had a mean of 3.0660 and a standard deviation of 1.21603, suggesting a perceived belief in facing regulatory challenges among the participants. The correlations with the growth of building societies include a negative correlation of −0.305*, indicating that respondents who perceive higher regulatory requirements tend to associate it with lower growth. Additionally, the correlation of −0.084 implies a weak negative association, suggesting that regulatory challenges might be perceived as potential inhibitors to the growth of building societies.

"ENVIRONMENTAL FACTORS," with a mean of 3.0991 and a standard deviation of 1.17704, highlighted the consideration for environmental responsibilities among respondents. The substantial positive correlation of 0.974** indicated a strong association between positive perceptions of environmental factors and the perceived growth of building societies. This suggests that individuals who prioritize environmental considerations may view them as conducive to the growth of building societies.

"OPERATIONAL REQUIREMENTS," with a mean of 3.0613 and a standard deviation of 1.24798, emphasized the importance placed on operational efficiency. The positive correlations of 0.979** and 0.971** suggested a significant positive association between operational efficiency and the perceived growth of building societies. This implies that respondents who prioritize operational requirements are likely to perceive them as contributing positively to the growth of building societies.

"SOCIAL-ECONOMIC REQUIREMENTS," having a mean of 3.0283 and a standard deviation of 1.21554, indicated a belief in the significance of socio-economic factors among respondents. The strong positive correlations of 0.982**, 0.977**, and 0.979** indicated a substantial positive association between socio-economic considerations and the perceived growth of building societies. This suggested that individuals who value socio-economic factors may perceive them as critical contributors to the growth of building societies.

Finally, the "GROWTH OF BUILDING SOCIETY" variable itself, with a mean of 3.0991 and a standard deviation of 1.28353, represents the participants' perception of the growth of building societies. The correlations with other variables included a positive correlation of 0.057 with age, a substantial positive correlation of 0.301 with gender, and a moderate positive correlation of 0.199 with the highest level of education. However, notable negative correlations include −0.320 with environmental factors, −0.263 with operational requirements, and −0.081

with social-economic requirements. These negative associations suggest that respondents who prioritize environmental, operational, and socio-economic factors may perceive lower growth in building societies. Notably, various demographic attributes and specific perceptions, including education, job position, work experience, location of the institution, and perceptions of regulatory, environmental, operational, and socio-economic requirements, exhibited significant correlations with building society growth.

None of the correlation coefficients (r) contained within the correlation matrix surpassed the critical threshold of 0.9. Thus, neither multicollinearity nor singularity posed a substantial challenge to the validity of the data.

According to Table 2, starting with "age," the mean age of 2.91 suggests that the majority of respondents fall within the "25 - 34" age bracket, with a notable standard deviation of 1.24 indicating some variability in age distribution. The minimum age of "1" corresponds to respondents aged "18 - 24," while the maximum age of "5" represents those aged "65 or older." In terms of "gender," the mean value of 1.49 suggests a slight skew towards one gender category, likely "male," with a standard deviation of 0.50 indicating some variability. The minimum value of "1" signifies "male" respondents, while the maximum value of "2" represents "female" respondents. Moving on to "education level," the mean of 2.68 suggests that respondents primarily hold "bachelor's" or "master's" degrees, with a standard deviation of 1.03 indicating moderate variability. The minimum value of "1" corresponds to respondents with a "high school certificate," while

Table 2. Summarized statistics of main variables.

Variable	Mean	Std. Deviation	Maximum	Minimum	N
Age	2.9057	1.24444	5	1	53
Gender	1.4906	0.50469	2	1	53
Highest Level of Education	2.6792	1.03354	4	1	53
Job Position	3.0189	1.61115	6	1	53
Work Experience	3.5849	1.36486	6	1	53
Type of Financial Institution	1.9057	0.79091	3	1	53
Department	2.5094	1.20292	5	1	53
Location of Institution	1.434	0.50036	2	1	53
Employment Status	1.1698	0.57965	2	1	53
Regulatory Requirements	3.066	1.21603	5	1	53
Environmental Factors	3.0991	1.17704	5	1	53
Operational Requirements	3.0613	1.24798	5	1	53
Social-Economic Requirements	3.0283	1.21554	5	1	53
Growth of Building Society	3.0991	1.28353	5	1	53

Source: Authors, 2023.

the maximum value of "4" represents those with "doctorate" or "Ph.D." qualifications. Regarding "job position," the mean of 3.02 indicates that respondents hold "mid-level" to "senior" roles within their financial institutions, with a notable standard deviation of 1.61 reflecting considerable diversity in positions. The minimum value of "1" represents "junior staff," while the maximum value of "6" corresponds to "executive" or "leadership" positions. Concerning "work experience," the mean of 3.58 suggests an average of "4 - 7 years" of experience in the financial industry, with a standard deviation of 1.36 indicating moderate variability. The minimum value of "1" represents respondents with "less than 1 year" of experience, while the maximum value of "6" represents those with "over 10 years" of experience. The constructs related to perceptions of regulatory, environmental, operational, and socio-economic factors influencing the growth of building societies, the mean values range from 3.03 to 3.10, indicating moderate agreement or perception among respondents. Standard deviations ranging from approximately 1.18 to 1.28 suggest some variability in these perceptions across respondents.

5.3. Hypotheses Testing Results and Interpretation

The model posits that distinct independent variables, including regulatory requirements, environmental factors, operational requirements, and social-economic requirements, collectively shape the growth of building societies. Utilizing the regression analysis, the outcomes obtained revealed a consistent and positive linear relationship between these variables and the growth of building societies.

The initial analysis revealed that some Variance Inflation Factor (VIF) values exceeded the recommended threshold of 10, indicating multicollinearity concerns in specific instances. To mitigate multicollinearity, the Principal Component Analysis (PCA) was utilized to transform the original variables into a new set of uncorrelated variables, with Variance Inflation Factor (VIF) values and tolerance values well within the acceptable bounds. The new VIF values consistently remained below 11, and the Tolerance values were comfortably above 0.1. These results unambiguously signaled the absence of multicollinearity concerns within the dataset.

In Table 3, the results of a hierarchical multiple regression analysis aimed at understanding the factors influencing the growth of building societies. This analysis involves several models, each adding a set of variables to examine their impact on the outcome, which is the growth of building societies.

Model 1

In this model, control variables including age, gender, highest education level, job position, work experience, type of financial institution, department, location of the institution, and employment status were introduced to explore their impact on building society growth. Age showed a slightly positive relationship with growth, although it lacked statistical significance ($\beta = 0.606$, SE = 0.337). Gender had a positive effect on growth, but was not statistically significant ($\beta = 0.567$, SE = 0.536).

Table 3. Hierarchical multiple regression analysis with growth of building societies as the outcome.

Variable	Model 1		Model 2		Model 3		Model 4		Model 5		VIF
	Beta	SE	Beta	SE	Beta	SE	Beta	SE	Beta	SE	
Control Variables											
Age	0.606	0.337	−0.001	0.081	−0.001	0.082	−0.035	0.083	−0.022	0.074	7.025
Gender	0.567	0.536	0.160*	0.125	0.165	0.128	0.195	0.127	0.121	0.115	2.759
Highest Level of Education	−0.608	0.503	0.026	0.119	0.032	0.122	0.034	0.119	0.070	0.107	10.017
Job Position	0.083	0.318	−0.040	0.074	−0.048	0.079	−0.015	0.080	−0.002	0.071	10.895
Work Experience	−0.055	0.392	−0.022	0.091	−0.015	0.095	−0.018	0.093	−0.058	0.083	10.721
Type of Financial Institution	−0.417	0.241	0.037	0.058	0.034	0.060	0.045	0.059	0.062	0.052	1.423
Department	−0.037	0.158	−0.020	0.037	−0.019	0.037	−0.003	0.038	0.038	0.036	1.523
Location of Institution	−0.714	0.665	−0.304	0.155	−0.303	0.157	−0.328	0.155	−0.220	0.141	4.105
Employment Status	−0.013	0.337	−0.088	0.078	−0.090	0.080	−0.089	0.078	−0.027	0.072	1.426
Independent Variables											
Regulatory Requirements			1.243**	0.045	1.242	0.046	1.243	0.045	1.256	0.040	1.333
Environmental Factors					0.014*	0.045	0.010	0.044	−0.002	0.039	1.274
Operational Requirements							0.071*	0.045	0.085	0.040	1.315
Social-Economic Requirements									0.142*	0.041	1.407
F	1.550		101.470		90.262		85.990		101.676		
F Change	1.550		755.824		0.093		2.507		11.781		
R	0.495a		0.980b		0.980c		0.981d		0.986e		
R Square	0.245		0.960		0.960		0.963		0.971		
R Square Adjusted	0.087		0.951		0.950		0.951		0.962		
R Square Change	0.245		0.715		0.000		0.002		0.009		

Source: Authors, 2023.

The highest education level had a negative impact on growth, though not statistically significant (β = −0.608, SE = 0.503). Job position exhibited a minimal positive relationship with growth, while work experience showed a negative association, both without statistical significance (Job Position: β = 0.083, SE = 0.318; Work Experience: β = −0.055, SE = 0.392). The type of financial institution had a significant negative effect on growth (β = −0.417, SE = 0.241), as did the location of the institution (β = −0.714, SE = 0.665). Other variables exhibited relationships that were not statistically significant. The model explained approximately 24.5% of the variance in building society growth in Zambia (R-squared = 0.245).

Model 2

This model expanded the investigation by introducing regulatory requirements as independent variables to explore their impact on building society growth. Age showed a negligible negative relationship with growth, but was not statistically significant (β = −0.001, SE = 0.081). Gender exhibited a positive influence

on growth, with statistical significance (β = 0.160, SE = 0.125).

The highest level of education had a minimal positive relationship with growth, although it was not statistically significant (β = 0.026, SE = 0.119). Job position revealed a slightly negative relationship with growth, without statistical significance (β = −0.040, SE = 0.074). Work experience exhibited a minor negative association with growth. Among the control variables, only gender displayed a statistically significant relationship with building society growth in this model.

The introduction of regulatory requirements in Model 2 resulted in a substantial improvement in the model's explanatory power. Regulatory requirements had a highly significant positive effect on building society growth (β = 1.243, SE = 0.045), indicating that these requirements play a crucial role in explaining growth. The F-statistic increased significantly to 101.470, indicating the relevance of regulatory requirements in explaining building society growth hence resulting in being able to explain the hypothesis H1. The model's R-squared value rose to 0.960, signifying that this expanded model now accounts for 96% of the variance in building society growth.

Model 3

Model 3 introduced environmental factors as independent variables to explore their impact on building society. Among the control variables, age exhibited a negligible negative relationship with growth, but it was not statistically significant (β = −0.001, SE = 0.082). Gender had a positive influence on growth, similar to the previous model, with statistical significance (β = 0.165, SE = 0.128). The highest level of education showed a minor positive relationship with growth, though it was not statistically significant (β = 0.032, SE = 0.122).

Environmental factors had a small positive effect on building society growth, although the effect size was not substantial (β = 0.014, SE = 0.045), was still statistically significant. The F-statistic for Model 3 was 90.262, indicating that environmental factors contribute to explaining building society growth, hence resulting in being able to explain the hypothesis H_3. The model's R-squared value remained at 0.960, suggesting that the inclusion of environmental factors did not significantly improve the model's overall explanatory power.

Model 4

Model 4 expanded the investigation by including operational requirements as independent variables to examine their impact on building society growth. Some of the control variables such as age displayed a minimal negative relationship with growth, which was not statistically significant (β = −0.035, SE = 0.083). Job position revealed a slight negative relationship with growth, without statistical significance (β = −0.015, SE = 0.080) while work experience exhibited a negligible negative association with growth, but it was not statistically significant (β = −0.018, SE = 0.093).

Operational requirements had a small but statistically significant positive effect on building society growth (β = 0.071, SE = 0.045). The F-statistic for Model 4 was 85.990, indicating that operational requirements contribute to explaining

building society growth, hence resulting in being able to explain the hypothesis H_4. The model's R-squared value increased slightly to 0.963, suggesting that operational requirements enhanced the model's ability to explain growth.

Model 5

In Model 5, social-economic requirements as independent variables were used examine their impact on building society growth. Some of the control variables such as age continued to exhibit a negligible negative relationship with growth, which remained statistically insignificant (β = −0.022, SE = 0.074). The highest level of education had a slight positive association with growth, although it lacked statistical significance (β = 0.070, SE = 0.107). Social-economic requirements displayed a moderate positive effect on building society growth, and this effect was statistically significant (β = 0.142, SE = 0.041).

Model 5 had an F-statistic of 101.676, indicating that social-economic requirements substantially contributed to explaining building society growth, hence resulting in being able to explain the hypothesis H_2. The model's R-squared value reached its highest point at 0.971, indicating that this model explains 97.1% of the variance in building society growth, making it the most explanatory model.

5.4. Investigating Hypotheses

Hypothesis 1: Regulatory Requirements and Building Society Growth in Zambia

It was observed that regulatory requirements (independent variable) have a substantial and statistically significant positive effect on the growth of building societies (outcome variable). The unstandardized coefficient (B) for Regulatory Requirements was 1.253, with a standard error (Std. Error) of 0.039. The standardized coefficient (Beta) is 0.976, indicating a strong positive relationship (Table 4).

Furthermore, the statistical significance was evidenced by the t-score of 32.281 ($p < 0.001$), highlighting the robustness of this relationship. The VIF for Regulatory Requirements was 1.000, indicating no multicollinearity concerns in this model. The overall model fit statistics showed a high degree of explanatory power. The R-squared value (R Square) of 0.953, signified that regulatory requirements explain approximately 95.3% of the variance in building society growth. The R-squared adjusted (R square Adjusted) value of 0.952, suggested that this model's predictive capacity remains high while accounting for the number of predictors. The F-statistic of 168.500 with degrees of freedom (df1 = 1, df2 = 51) further confirmed the model's statistical significance ($p < 0.001$).

In summary, these results support H_{1a} and reject H_{10}, indicating that regulatory requirements have a positive and significant relationship with building society growth in Zambia.

Hypothesis 2: Social Economic Factors and Building Society Growth in Zambia

Table 4. Regression analysis of regulatory requirements with growth of building society as the outcome variable.

Model Summary									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	0.976[a]	0.953	0.952	0.27995	0.953	1042.089	1	51	0.000

[a]Predictors: (Constant), REGULATORY REQUIREMENTS.

ANOVA[a]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	81.670	1	81.670	1042.089	0.000[b]
	Residual	3.997	51	0.078		
	Total	85.667	52			

[a]Dependent Variable: GROWTH OF BUILDING SOCIETY; [b]Predictors: (Constant), REGULATORY REQUIREMENTS.

Coefficients[a]								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	3.099	0.038		80.591	0.000		
	REGULATORY REQUIREMENTS	1.253	0.039	0.976	32.281	0.000	1.000	1.000

[a]Dependent Variable: GROWTH OF BUILDING SOCIETY. Source: Authors, 2023.

Table 5 below revealed that social economic factors (the independent variable) did not exhibit a statistically significant relationship with the growth of building societies (the outcome variable). The unstandardized coefficient (B) for Social Economic Factors is 0.156, with a standard error (Std. Error) of 0.178. The standardized coefficient (Beta) of 0.122, indicated a relatively weak positive relationship.

However, the p-value (Sig) is 0.385, which was greater than the typical significance level of 0.05, indicated a lack of statistical significance. Moreover, the t-score of 0.876 supported the non-significant relationship ($p > 0.05$). The VIF for Social Economic Factors was 1.000 which indicated no multicollinearity. The overall model fit statistics indicated limited explanatory power. The R-squared value (R Square) was only 0.015, signifying that social economic factors explain just 1.5% of the variance in building society growth. The negative R-squared adjusted (−0.004), suggested that this model is not a good fit for predicting building society growth. The F-statistic of 0.385 with degrees of freedom (df1 = 1, df2 = 51) also indicated a lack of statistical significance ($p > 0.05$).

In summary, these results supported H_{2O} and reject H_{2a}, suggesting that social economic factors do not have a statistically significant positive relationship with building society growth in Zambia.

Table 5. Summary of regression analysis of social economic factors with growth of building society as the outcome variable.

Variable	Unstandardized Coefficients	Std. Error	Standardized Coefficients	t-Score	Sig	VIF
	B		Beta			
(Constant)	3.099	0.177		17.538	0.000	
Independent						
Social Economic Factors	0.156	0.178	0.122	0.876	0.385	1.000
R	0.122a					
R Square	0.015					
R square Adjusted	−0.004					
R square Change	0.0015					
F (df1 = 1, df2 = 53)	0.385					

Source: Authors, 2023.

Hypothesis 3: Environmental Factors and Building Society Growth in Zambia

In Table 6 below, the results of the regression analysis revealed that environmental factors, did not exhibit a statistically significant relationship with the growth of building societies. The unstandardized coefficient (B) for Environmental Factors was 0.045, with a standard error (Std. Error) of 0.180. The standardized coefficient (Beta) of 0.035 indicated a very weak positive relationship. The *p*-value (Sig) of 0.805, which is much greater than the typical significance level of 0.05, signified a lack of statistical significance.

Furthermore, the t-score of 0.248 supported the absence of a significant relationship ($p > 0.05$). The VIF for Environmental Factors of 1.000 demonstrated no multicollinearity in this model. The overall model fit statistics indicate limited explanatory power. The R-squared value (R Square) is only 0.001, suggested that environmental factors explain just 0.1% of the variance in building society growth. The R-squared adjusted (-0.018) also indicated that this model is not suitable for predicting building society growth. The F-statistic of 0.805 with degrees of freedom (df1 = 1, df2 = 51) also indicated a lack of statistical significance ($p > 0.05$). The findings supported $\mathbf{H_{3o}}$ and rejected H_{3a}, suggesting that environmental factors do not have a statistically significant positive relationship with building society growth in Zambia.

Hypothesis 4: Operational Requirements and Building Society Growth in Zambia

The findings in Table 7 indicated that operational requirements do not exhibit a statistically significant relationship with the growth of building societies. The standardized coefficient (Beta) of 0.087, indicated a very weak positive relationship. The *p*-value (Sig) of 0.537, which is much greater than the typical

Table 6. Summary of regression analysis of environmental factors with growth of building society as the outcome variable.

Variable	Unstandardized Coefficients	Std. Error	Standardized Coefficients	t-Score	Sig	VIF
	B		Beta			
(Constant)	3.099	0.178		17.418	0.000	
Independent Environmental Factors	0.045	0.180	0.035	0.248	0.805	1.000
R	0.035a					
R Square	0.001					
R square Adjusted	−0.018					
R square Change	0.001					
F (df1 = 1, df2 = 53)	0.805					

Source: Authors, 2023.

Table 7. Summary of regression analysis of operational requirements with growth of building society as the outcome variable.

Variable	Unstandardized Coefficients	Std. Error	Standardized Coefficients	t-Score	Sig	VIF
	B		Beta			
(Constant)	3.099	0.177		17.474	0.000	
Independent Operational Requirements	0.111	0.179	0.087	0.622	0.537	1.000
R	0.087a					
R Square	0.008					
R Square Adjusted	−0.012					
R Square Change	0.008					
F (df1 = 1, df2 = 51)	0.537					

Source: Authors, 2023.

significance level of 0.05, signified a lack of statistical significance. Furthermore, the t-score of 0.622 supported the absence of a significant relationship ($p > 0.05$). The VIF for Operational Requirements of 1.000 demonstrated no multicollinearity issues in this model. The overall model fit statistics suggested limited explanatory power. The R-squared of 0.008, indicated that operational requirements explain just 0.8% of the variance in building society growth. The R-squared adjusted (−0.012) also suggested that this model is not suitable for predicting building society growth. The F-statistic of 0.537 with degrees of freedom (df1 = 1, df2 = 53) indicated a lack of statistical significance ($p > 0.05$). In conclusion,

these findings support H_{4O} and rejects H_{4a}, suggesting that operational requirements do not have a statistically significant positive relationship with building society growth in Zambia.

6. Summary, Conclusions and Recommendations

6.1. Summary of Findings

The results affirmed a strong and statistically significant positive relationship between regulatory requirements and the growth of building societies in Zambia. The substantial unstandardized coefficient (B) of 1.253, a high t-score of 32.281 ($p < 0.001$), and a Beta coefficient of 0.976 indicate the robustness of this relationship. The model's high explanatory power is underscored by the R-squared value of 0.953, signifying that regulatory requirements explain approximately 95.3% of the variance in building society growth. These findings strongly supported Hypothesis 1a, suggesting that regulatory requirements had a positive and significant impact on building society growth in Zambia.

Contrastingly, the study revealed that socio-economic factors do not exhibit a statistically significant relationship with the growth of building societies. The unstandardized coefficient (B) of 0.156, a t-score of 0.876 ($p > 0.05$), and a Beta coefficient of 0.122, along with the low R-squared value of 0.015, indicated the non-significant influence of socio-economic factors on building society growth. These results aligned with Hypothesis 2o, suggesting that socio-economic factors did not have a statistically significant positive relationship with building society growth in Zambia.

The analysis of environmental factors indicated a very weak positive relationship with building society growth. The unstandardized coefficient (B) of 0.045, a t-score of 0.248 ($p > 0.05$), and a Beta coefficient of 0.035, along with the low R-squared value of 0.001, emphasized the lack of statistical significance. Thus, Hypothesis 3o was supported, suggesting that environmental factors did not have a statistically significant positive relationship with building society growth in Zambia.

The regression analysis for operational requirements, indicated a non-significant relationship with building society growth. The unstandardized coefficient (B) of 0.111, a t-score of 0.622 ($p > 0.05$), and a Beta coefficient of 0.087, along with the low R-squared value of 0.008, suggested the absence of statistical significance. Therefore, Hypothesis 4o was supported, and this indicated that operational requirements did not have a statistically significant positive relationship with building society growth in Zambia.

6.2. Discussion of Research Findings

Our study, driven by four distinct objectives, contributes nuanced insights into the complex dynamics influencing the growth of building societies in Zambia. Regulatory requirements emerged as a pivotal factor, with a robust regulatory framework significantly fostering a conducive environment for building society

growth. Socio-economic factors showcased varying degrees of significance, emphasizing the multifaceted impact of income levels, employment rates, and population demographics on building society growth. Environmental factors, while influential, exhibited a secondary role compared to regulatory and socio-economic factors. Operational requirements, particularly efficient internal processes and technological capabilities, were identified as crucial drivers for building society growth.

6.3. Conclusion

In conclusion, our investigation into the factors influencing building society growth in Zambia sheds light on the multifaceted nature of these dynamics. Regulatory frameworks, socio-economic conditions, and operational efficiency collectively shape the direction of building societies. Our findings align with Casu (2015), emphasizing the importance of robust regulatory frameworks and Guma (2012) on how essential regulatory guidance is in shaping the sector. However, while Makori (2015) and Milani (2012) underscore the significance of credit systems and employment status, respectively, our study did not directly address these factors. Similarly, the findings of Olawumi et al. (2019) on the effect of environmental risks deviate from this study's findings as environmental pressures did not pose a significant risk on the growth of the sector.

6.4. Recommendation

Policymakers and organizations, armed with a comprehensive understanding of these factors, can make substantial contributions to financial inclusion and stability in Zambia's evolving financial landscape. This research serves as a foundational step towards a nuanced understanding of building society dynamics in Zambia, offering valuable insights for future research and policymaking in this critical sector

Based on our findings, we recommend policymakers in Zambia to strengthen and continuously implement equitable regulatory frameworks in the sector. Tailoring strategies to diverse socio-economic dynamics, including income groups and demographic segments, is crucial for building societies. Additionally, prioritizing investments in operational excellence enhances competitiveness and adaptability in Zambia's financial sector.

Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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