

Governance and financial management capability as determinants of financial sustainability in private schools in Lusaka Province, Zambia

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ABSTRACT

Governance and financial management capability are widely recognised as foundational organisational prerequisites for financial sustainability, yet their specific effects on private schools in sub-Saharan African developing country contexts remain empirically underexplored. This study examines the influence of governance and financial management capability on the financial sustainability of private schools in Lusaka Province, Zambia. The Tuckman–Chang Financial Vulnerability Model and Governance as well as Bowman's Financial Capacity Framework and governance guided this research. Using an explanatory sequential mixed-methods design (QUAN→qual), quantitative data were collected from 272 valid survey questionnaire responses drawn from school owners, principals, bursars, and accountants at private primary and secondary schools across the six districts of Lusaka Province. The study employed two-stage stratified random sampling guided by Yamane's formula at a 5% margin of error and 95% confidence level. Qualitative data were gathered through 15 purposively selected semi-structured telephone interviews. A Financial Sustainability Index (FSI) was computed using Principal Component Analysis (PCA), yielding a mean FSI of 0.53 (SD = 0.202), indicating moderate but fragile financial sustainability across the sector. Strikingly, the governance and financial management capability construct recorded very low mean scores across all seven items, ranging from 1.76 to 1.86 on the five-point Likert scale, reflecting substantial and pervasive governance deficits in the private school sector. Exploratory factor analysis confirmed a strong single-factor structure for the governance construct (KMO = 0.928; chi-square = 1,482.52; $p < .001$; eigenvalue = 5.11; variance explained = 72.94%). Pearson correlation analysis, supported by bias-corrected bootstrap estimation, revealed a moderate, positive, and statistically significant relationship between governance and financial management capability and the FSI ($r = 0.449$; $p < .001$; BCa 95% CI: 0.22–0.68). Multiple regression analysis confirmed governance and financial management capability as a significant and independent predictor of financial sustainability in the full model ($R^2 = 0.37$; $F(7,264) = 21.96$; $p < .001$). Critically, moderation analysis demonstrated that both regulatory intensity and market competition significantly moderated the governance–financial sustainability relationship, with regulatory intensity positively moderating and market competition negatively moderating the effect. Qualitative findings strongly corroborated these results, with participants consistently identifying structured governance arrangements, transparent financial reporting, regular budget monitoring, and accountability mechanisms as practices most closely associated with better financial sustainability outcomes. The study concludes that strengthening governance and financial management capability in private schools is both an urgent necessity and a high-return institutional investment for improving financial sustainability in Zambia's private education sector. This study recommends that private school proprietors and administrators should prioritise the development of formal financial governance structures, even in small and resource-constrained institutions.

Keywords: Financial Management, Financial Sustainability, Governance Capability, Lusaka Province, Private Schools, Zambia

I. INTRODUCTION

The governance and financial management capacity of an educational institution constitutes a foundational determinant of its ability to achieve and maintain financial sustainability. In the context of private schools in sub-Saharan Africa, where institutional systems are frequently informal, management expertise is often limited, and accountability mechanisms are underdeveloped, governance quality assumes heightened strategic importance as a driver of financial health. The corporate governance, non-profit management, and education finance literatures consistently demonstrate that organisations with stronger governance structures, characterised by clear financial policies, transparent reporting systems, effective oversight mechanisms, and rigorous accountability frameworks, maintain more stable financial health than those with weaker governance arrangements (Herman & Renz, 2000; Ostrower & Stone, 2010; Alshareef & Sulimany, 2024).

In Zambia's private school sector, governance deficits are particularly pronounced. Many private schools are owner-managed operations where the proprietor performs all administrative, educational, and financial management

functions simultaneously without the benefit of formal governance structures, financial management systems, or independent oversight. In this environment, financial decisions are made intuitively, budgeting is informal, financial reporting is irregular, and accountability to any external stakeholder is limited. The consequences of this governance deficit are directly reflected in the financial fragility of the sector: schools that lack governance infrastructure are poorly positioned to manage costs effectively, develop diversified income streams, or build the financial reserves needed to withstand external shocks. Batizani (2026) confirms that strengthening financial governance structures, institutionalising internal controls, and adopting proactive financial risk management are critical for improving financial sustainability of higher educational institutions in developing country contexts.

Financial governance in educational institutions encompasses multiple interrelated dimensions. At the strategic level, it includes board oversight of financial performance, financial policy development, risk management, and investment decision-making. At the operational level, it encompasses budgeting, cash flow monitoring, expenditure control, internal controls, financial reporting, and audit compliance. Handayani et al. (2023) demonstrate that good financial governance is key for increased financial sustainability, while Chiwodza et al. (2023) confirm through multivariate linear regression analysis that financial administration and management positively influence financial sustainability of educational institutions. These findings collectively underscore the theoretical prediction that governance capability is both a direct determinant of financial sustainability outcomes and an enabling condition for the effective deployment of other financial sustainability strategies.

Despite the theoretical importance of governance as a financial sustainability driver, empirical studies specifically examining the governance–financial sustainability relationship in private primary and secondary schools in Zambia are absent from the literature. The existing evidence base is concentrated in higher education institutions, large non-profit organisations, and corporate governance contexts, predominantly in developed country settings. This study addresses this gap directly by investigating the influence of governance and financial management capability on the financial sustainability of private schools in Lusaka Province, Zambia, using a rigorous mixed-methods design that generates both statistically generalisable findings and contextually rich explanations of the mechanisms through which governance affects financial sustainability.

1.1 Statement of the Problem

Private schools in Lusaka Province operate in an institutional environment characterised by significant and widespread governance deficits. Unlike higher education institutions in Zambia, which are subject to statutory governance requirements including mandated governing councils, financial reporting standards, and external audit requirements, private primary and secondary schools operate under comparatively light regulatory governance requirements. The absence of mandatory minimum governance standards for the sector, including requirements for financial management policies, board-level financial oversight, budget monitoring, and audit mechanisms, has produced a sector in which governance quality varies enormously and is largely determined by the individual capacity and inclination of school proprietors.

This governance gap creates direct and measurable financial sustainability risks. Schools without structured financial governance are unable to monitor their financial performance systematically, unable to identify and address cost inefficiencies proactively, unable to develop and execute revenue diversification strategies effectively, and unable to build the institutional accountability systems needed to attract donor funding, partnerships, and community support. The descriptive findings of this study, showing governance capability mean scores between 1.76 and 1.86 on a five-point scale across all seven governance items, provide quantitative confirmation of the pervasive and severe nature of governance deficits in the sector. The specific quantified effects of these deficits on financial sustainability outcomes, and the moderating roles of regulatory intensity and market competition in shaping these effects, require empirical investigation to provide the evidence base for informed policy and practice interventions.

1.2 Research Objective

The primary objective of this study is to examine the influence of governance and financial management capability on the financial sustainability of private schools in Lusaka Province, Zambia.

1.3 Research Hypothesis

H₀₁: Governance and financial management capability positively influences financial sustainability of private schools in Zambia.

H₀₂: Regulatory intensity and market competition have significant moderating effects on the relationship between governance and financial management capability and financial sustainability of private schools in Zambia.

II. LITERATURE REVIEW

2.1 Theoretical Review

2.1.1 The Tuckman–Chang (1991) Financial Vulnerability Model and Governance

The Tuckman–Chang (1991) model identifies low administrative costs, used as a proxy for under-investment in administrative and management systems, as one of its four primary indicators of organisational financial vulnerability. This indicator reflects the theoretical argument that organisations which systematically underinvest in governance and management infrastructure compromise their institutional resilience by sacrificing the oversight, accountability, and strategic planning capacity needed to navigate financial challenges. Tuckman and Chang (1991) argue that apparent savings from under-investing in administrative systems are illusory: the true cost is the financial vulnerability that results from the absence of governance and management capacity to optimise resource allocation, prevent financial mismanagement, and maintain operational efficiency.

Applied to private schools in Zambia, the model predicts that institutions with weak governance and financial management capability will exhibit higher financial vulnerability and lower FSI scores than those with stronger governance arrangements, because they lack the institutional infrastructure needed to manage their financial resources effectively. The model further predicts that governance capability moderates the effectiveness of other financial management strategies: schools with stronger governance are better positioned to develop and execute revenue diversification strategies, implement cost management systems, and use pricing decisions strategically, thereby compounding the financial sustainability benefits of governance investment. This moderating role of governance on other financial sustainability strategies creates an institutional amplification effect that makes governance capability development a particularly high-leverage intervention.

2.1.2 Bowman's (2011) Financial Capacity Framework and Governance

Bowman's (2011) financial capacity framework positions governance and financial management as primary enablers of both short-term and long-term financial capacity. Short-term financial capacity, the immediate ability to meet operational obligations and maintain institutional functioning, requires competent operational financial management, including cash flow monitoring, budgeting, expenditure control, and financial reporting. Long-term financial capacity, the ability to invest in mission advancement, build reserves, and develop institutional resilience, requires strategic governance, including financial policy development, board oversight of financial performance, reserve management, and investment decision-making.

Bowman (2011) argues that organisations lacking these governance and management capabilities are unable to build long-term financial capacity regardless of the strength of their revenue streams, because without effective governance, financial resources are inevitably misallocated, under-reported, or dissipated through inefficiency. For private schools in Zambia, this means that governance capability is not merely a compliance or administrative consideration but a strategic financial sustainability prerequisite. The framework predicts that investments in governance and financial management capacity will generate measurable returns in financial sustainability outcomes by improving the efficiency and accountability with which financial resources are managed across the institution.

The integration of the Tuckman–Chang (1991) and Bowman (2011) frameworks creates a complementary theoretical foundation for the governance–financial sustainability hypothesis. The Tuckman–Chang model explains why governance deficits create financial vulnerability, while Bowman's framework explains the mechanism through which governance capability improvements translate into financial capacity and sustainability gains. Together, these frameworks provide convergent theoretical support for the expectation that governance capability will be positively and significantly associated with financial sustainability in the private school context.

2.2 Empirical Review:

2.2.1 Governance, Financial Management, and Financial Sustainability

The empirical relationship between governance capability and financial sustainability has been extensively documented across non-profit, educational, and public sector contexts. Herman and Renz (2000) conducted a landmark comparative study of local non-profit organisations in the United States, finding that board effectiveness, measured by governance policy implementation, financial oversight intensity, and board composition quality, was among the strongest predictors of organisational financial performance and sustainability. Their study found that organisations with more engaged, financially knowledgeable boards reported consistently higher financial health scores, larger reserve ratios, and lower rates of financial distress, establishing a direct empirical link between governance quality and financial sustainability outcomes.

Ostrower and Stone (2010) extended this analysis in a large-scale study of governance practices among 1,294 American non-profit organisations, finding that formalised governance practices, including written financial management policies, regular board financial reviews, transparent procurement processes, and structured audit

procedures, were significantly associated with better financial performance and lower rates of financial distress. Their study highlighted that governance functions as a strategic resource that actively shapes organisational financial outcomes, rather than merely a compliance burden imposed by external regulators. Cheuk (2021) conducted an empirical study of operating charities in Malaysia and found that financial management capacity and accountability mechanisms significantly predicted financial sustainability, with organisations demonstrating higher governance scores maintaining larger reserve ratios and longer operational histories.

Abong and Ombaba (2018) examined community-based organisations in Turkana County, Kenya, and found that financial management capabilities, including structured budgeting, financial record-keeping, and internal control mechanisms, significantly predicted financial sustainability. The analysis associated sustainability with tangible management strategies including budgeting, accounting systems, sound cash management, written financial operations, and external auditing. This finding is directly relevant to Zambia's private school sector, which exhibits comparable organisational characteristics including resource constraints, informal management systems, and mission-driven operational objectives.

2.2.2 Evidence from Corporate Governance Research

Alshareef and Sulimany (2024) examined 97 non-financial listed firms in Saudi Arabia from 2013 to 2022 and revealed that board financial expertise had a significant positive impact on financial sustainability. Their results indicate that companies with higher proportions of finance professionals on boards tend to realise long-term value and have better risk management performance. This finding identifies a specific dimension of governance, financial expertise of board members, as particularly influential in determining financial sustainability outcomes. Applied to the Zambian private school context, it suggests that schools whose governing bodies include individuals with formal financial management training should demonstrate better financial sustainability outcomes than those governed by boards lacking financial expertise.

Tran et al. (2025) provide an important qualification to the governance–sustainability relationship through their analysis of Australian public universities, which found that the relationship between administrative intensity and financial sustainability followed a non-linear, U-shaped pattern. Their findings indicate that insufficient administrative capacity leads to poor coordination, oversight deficiencies, and compliance failures, but excessive administration can also raise overheads and lead to organisational inefficiency. This non-linearity suggests that governance improvement recommendations should be calibrated to the scale and context of the institutions concerned, and that the goal should be appropriate rather than maximal governance investment. For small private schools in Zambia, this finding implies that simple, cost-effective governance improvements, rather than comprehensive bureaucratic governance systems, may be the most appropriate and sustainable interventions.

2.2.3 Evidence from Educational Institution Research in Africa

In the educational context in Africa, Chiwodza et al. (2023) found that financial governance, including clear financial policies, structured reporting, and accountability mechanisms, was among the most important determinants of financial sustainability in Zimbabwean public universities. The scholars concluded that improving cost management and governance practices can drive financial sustainability, with the specific governance practices most associated with improved sustainability being those creating regular feedback loops between financial performance data and institutional decision-making. Batizani (2026) concluded, using a convergent mixed-methods design, that strengthening financial governance structures, institutionalising internal controls, and adopting proactive financial risk management are critical for improving financial sustainability of higher educational institutions in Malawi, providing directly analogous evidence from a comparable sub-Saharan African context.

Nalwoga (2021) found in qualitative research on private universities in Uganda that despite major external threats, the ability to manage internal financial resources through sound governance practices was essential to financial sustainability, with institutions demonstrating more formalised financial management processes maintaining more stable financial positions. Riachi (2021) found that factors such as financial governance and strategic financial planning contribute significantly to financial sustainability of Kenyan educational institutions, with the most financially sustainable institutions demonstrating structured governance arrangements that informed strategic financial decision-making.

2.3 Research Gaps

The empirical review reveals three specific gaps that this study addresses. First, no previous study has empirically examined the governance–financial sustainability relationship specifically in private primary and secondary schools in Zambia, leaving a critical evidence gap for both policy and practice. Second, the existing literature has not examined the moderating roles of regulatory intensity and market competition in shaping the governance–financial sustainability relationship, particularly in the context of developing country educational markets. Third, the use of a

composite FSI as the dependent variable provides a more comprehensive and theoretically appropriate measure of financial sustainability than the single indicators used in most prior research. This study addresses all three gaps while also contributing the first empirical quantification of governance capability levels in the Zambian private school sector.

III. METHODOLOGY

3.1 Research Philosophy and Design

The study adopted the pragmatist research philosophy, supporting the use of both quantitative and qualitative methods in the service of the research problem (Creswell & Creswell, 2022; Saunders et al., 2023). An explanatory sequential mixed-methods design (QUAN→qual) was employed, in which quantitative data collection and analysis provided the statistical foundation for understanding governance–financial sustainability relationships, with a subsequent qualitative phase providing contextual explanation of the mechanisms, processes, and experiences underlying the quantitative patterns. This design was particularly appropriate for this study because governance practices and their financial sustainability effects are simultaneously measurable through survey instruments and richly explicable through in-depth interviews with experienced school administrators.

3.2 Study Area, Population, and Sampling

The research was conducted across the six districts of Lusaka Province, where 594 registered private primary and secondary schools are distributed as follows: Lusaka District (64%), Chilanga District (12%), Chongwe District (11%), Kafue District (8%), Luangwa District (3%), and Rufunsa District (2%) (Ministry of Education, 2025). The study population comprised school owners, principals, bursars, and accountants, identified as individuals with direct knowledge of and responsibility for institutional financial governance. Yamane's (1973) formula was applied to determine a minimum sample of 240, adjusted to 300 to account for non-response. After data cleaning, 272 valid responses were retained, representing a 90.7% response rate. Two-stage stratified random sampling ensured proportionate representation across districts and school levels. For the qualitative phase, 15 participants were purposively selected to represent diverse institutional roles, school types, and financial sustainability levels, with saturation achieved at the fifteenth interview (Hennink et al., 2017).

3.3 Data Collection and Analysis

The governance and financial management capability scale comprised seven five-point Likert items covering: governance structure clarity for financial decision-making; regular financial auditing; effective internal controls; risk management planning; leadership commitment to financial sustainability; regular review of financial management policies; and oversight and accountability mechanisms. The scale was adapted from validated instruments in the financial governance literature (Chiwodza et al., 2023; Handayani et al., 2023), contextualised for the Zambian private school setting, with a Cronbach's alpha of 0.84 and Average Variance Extracted of 0.63.

Quantitative analysis included descriptive statistics, EFA for construct validation, Pearson correlation analysis with BCa bootstrap confidence intervals, multiple linear regression, and moderation analysis using PROCESS Macro version 4.2 (Hayes, 2013). All regression assumptions were verified before interpreting coefficients. Qualitative data were analysed using Braun and Clarke's (2022) six-step reflexive thematic analysis, supported by NVivo version 15 software. Trustworthiness was established through data triangulation, member checking, and transparent methodological reporting (Creswell & Creswell, 2022).

IV. FINDINGS & DISCUSSIONS

4.1 Demographic Profile of Respondents

Table 1 provides a summary of the demographic characteristics of the respondents and interview participants in the study. The table includes key variables such as age, gender, educational background, and other relevant demographic information.

Table 1
Demographic Profile of Respondents and Interview Participants

Variable	Category	Frequency (n)	Percentage (%)
Survey Respondents (N=272)			
Gender	Male	147	54
	Female	125	46
Age Group (Years)	31–50 (combined)	—	58.1
	41–50 (modal category)	—	31.3
Education Level	Undergraduate Degree	—	44.1
	Master's Degree	—	17.3
Work Experience (Years)	6–10 Years	—	41.2
Role/Position	Bursars/Accountants	—	41.9
	School Heads/Principals	—	37.5
	School Owners	—	20.6
School Location	Urban	—	41.2
	Rural	—	29.4
	Peri-Urban	—	18.4
Qualitative Participants (n=15)			
Role	School Owners	4	—
	Principals	4	—
	Bursars	4	—
	Administrators	3	—
Experience (Years)	5–15 Years	15	—

The sample comprised 147 males (54.0%) and 125 females (46.0%). The modal age cohort was 41–50 years (31.3%), and 58.1% of respondents were aged between 31 and 50 years, reflecting a predominantly experienced, mid-career sample. Most respondents (44.1%) held undergraduate degrees, with 17.3% holding master's degrees. In terms of experience, 41.2% had worked 6–10 years at their current schools. By role, 41.9% were bursars or accountants, 37.5% school heads or principals, and 20.6% school owners. School locations were distributed as urban (41.2%), rural (29.4%), and peri-urban (18.4%), ensuring geographic representation across the province. The 15 qualitative participants included school owners (n=4), principals (n=4), bursars (n=4), and administrators (n=3), with experience ranging from 5 to 15 years.

4.2 Financial Sustainability Index Results

Table 2 presents the results of the Financial Sustainability Index (FSI) analysis for the private schools included in the study. The table summarizes the FSI scores and their classification, offering insight into the overall financial sustainability status of the participating schools.

Table 2
Financial Sustainability Index (FSI) Results and Classification (N = 272)

Variable	Category/Statistic	Value
Overall FSI Score	Mean	0.53
	Standard Deviation	0.202
FSI Classification (Sazonov et al., 2015)	Absolute Sustainability	15.40%
	Normal Sustainability	39.00%
	Unstable Sustainability	39.00%
	Critical Sustainability	6.60%
	Unstable + Critical (Combined)	45.60%
Principal Component Analysis (PCA)	Eigenvalue	4.25
	Variance Explained (%)	60.65%
	Factor Loadings Range	0.76–0.81
Sampling Adequacy	KMO Statistic	0.922

The mean FSI of 0.53 (SD = 0.202) across the 272 sampled schools indicated moderate but fragile financial sustainability across the sector. Applying the Sazonov et al. (2015) classification criteria, 39% of schools were classified as having normal financial sustainability, 39% unstable, 15.4% absolute, and 6.6% critical. The finding that 45.6% of schools were in financially unstable or critical condition provides strong empirical evidence of the sector-wide financial sustainability challenge and the urgent need for governance improvement interventions. PCA confirmed the single-factor structure of the FSI (eigenvalue = 4.25; variance explained = 60.65%; all item loadings between 0.76 and 0.81), with the KMO statistic of 0.922 confirming very high sampling adequacy.

4.2.1 Governance and Financial Management Capability Levels

Table 3 summarizes the descriptive statistics and factor analysis results related to governance and financial management capability among the surveyed private schools. The table highlights key indicators, their statistical measures, and the underlying factor structure for governance and financial management capability.

Table 3

Descriptive Statistics and Factor Analysis for Governance and Financial Management Capability (N = 272)

Variable/Component	Indicator/Statistic	Value
Descriptive Statistics (7 Items)	Mean Score Range	1.76–1.86
	Standard Deviation Range	0.847–0.898
	Highest Mean Item	Internal controls effectiveness (M = 1.86; SD = 0.898)
	Lowest Mean Item	Governance structure clarity (M = 1.76; SD = 0.847)
	Overall Interpretation	Disagree (low governance capability)
	Distribution Shape	Positively skewed; low kurtosis (approximately normal)
Exploratory Factor Analysis (EFA)	Kaiser-Meyer-Olkin (KMO)	0.928
	Bartlett's Test of Sphericity (Chi-square)	1,482.52***
	Significance Level	p < .001
	Eigenvalue	5.11
	Variance Explained (%)	72.94%
	Factor Structure	Unidimensional
Factor Loadings	Strong across all 7 items	
Construct Validity	Composite Measure Justification	Supported

Note: ***p < .001 indicates statistical significance.

The descriptive statistics for governance and financial management capability revealed strikingly low mean scores across all seven items, ranging from 1.76 to 1.86 on the five-point Likert scale. These scores fall within the 'disagree' range of the scale, indicating that the great majority of respondents disagreed that their schools had adequate governance and financial management capabilities. The item 'The private school implements effective internal controls to monitor and manage financial resources' recorded the highest mean (M = 1.86; SD = 0.898), while 'The private school has a clear governance structure that supports financial decision-making and planning' recorded the lowest mean (M = 1.76; SD = 0.847).

The standard deviations between 0.847 and 0.898 indicate moderate but consistent response dispersion, suggesting that while views varied, the central tendency of 'disagree' was consistent across respondents and items. The positive skewness values and low kurtosis confirm approximately normal distributions skewed toward the lower end of the scale, indicating that most respondents perceived governance capability as limited rather than adequate. EFA confirmed the unidimensional structure of the governance capability construct (KMO = 0.928; chi-square = 1,482.52; p < .001; eigenvalue = 5.11; variance explained = 72.94%), with strong single-factor loadings across all seven items justifying the use of a composite governance capability score in inferential analyses.

4.2.2 Governance Capability and Financial Sustainability: Correlation Analysis

Table 4 displays the results of the Pearson correlation and bootstrap analyses conducted to assess the relationship between governance capability and financial sustainability (FSI) in private schools. These results offer an understanding of the strength and statistical significance of the association between governance capability and financial sustainability.

Table 4*Pearson Correlation and Bootstrap Results for Governance Capability and Financial Sustainability (FSI)*

Variable/Component	Indicator/Statistic	Value
Correlation Analysis	Pearson Correlation Coefficient (r)	0.449
	Significance Level	$p < .001$
	Strength of Relationship	Moderate, Positive
	Practical Interpretation	1 SD increase in governance → 0.449 SD increase in FSI
Bootstrap Results (BCa)	95% Confidence Interval	0.22 – 0.68
	Standard Error	0.107
	Bias	0.005
	CI Includes Zero?	No
	Stability of Estimate	High (robust)
Overall Interpretation	Statistical Significance	Supported
	Practical Significance	Substantial
	Implication	Governance capability positively influences financial sustainability

Note: BCa = Bias-Corrected and Accelerated bootstrap confidence interval.

Pearson correlation analysis revealed a moderate, positive, and statistically significant relationship between governance and financial management capability and the FSI ($r = 0.449$; $p < .001$; BCa 95% CI: 0.22–0.68). The bootstrap results confirmed stability of this estimate, with a negligible bias of 0.005 and a standard error of 0.107. The BCa confidence interval excluding zero provides strong evidence that the population relationship between governance capability and financial sustainability is positive and significant. While the correlation coefficient of 0.449 is classified as moderate, it represents a practically meaningful relationship: a one-standard-deviation improvement in governance capability is associated with a 0.449-standard-deviation improvement in financial sustainability, an effect size with substantial practical significance for policy and practice.

These results represent a significant contribution to the literature, as they constitute the first quantified estimation of the governance–financial sustainability relationship specific to private primary and secondary schools in Zambia. The moderate rather than strong correlation magnitude may reflect the constraining effect of the severe governance deficits observed across the sector: when governance capability is universally low, its variation has a more limited ability to predict variation in sustainability outcomes than would be the case if there were greater diversity in governance capability levels. This interpretation suggests that the returns to governance improvement may be substantially higher than the cross-sectional correlation coefficient indicates, particularly for schools moving from very low to moderate governance capability levels.

4.2.3 Moderation Analysis: Regulatory Intensity and Market Competition

Moderation analysis using PROCESS Model 2 revealed that both regulatory intensity and market competition significantly moderated the relationship between governance and financial management capability and financial sustainability (overall model: $R^2 = 0.37$; $F(7,264) = 21.96$; $p < .001$). Regulatory intensity was found to have a significant positive moderating effect on the governance–financial sustainability relationship ($B = 0.08$; $SE = 0.02$; $t = 3.51$; $p < .001$; 95% CI: 0.03–0.12). This finding indicates that in environments with stronger regulatory oversight, the financial sustainability benefits of governance capability are amplified: schools in more regulated environments obtain greater financial sustainability returns from governance improvements than those in less regulated environments. A plausible mechanism is that regulatory compliance requirements reinforce governance practices, creating synergistic effects between regulatory pressure and internal governance quality.

Market competition was found to have a significant negative moderating effect ($B = -0.11$; $SE = 0.03$; $t = -3.31$; $p < .001$; 95% CI: -0.18 to -0.05). This indicates that in more competitive markets, the financial sustainability benefits of governance capability improvements are partially offset by competitive pressures that constrain the ability of even well-governed schools to generate adequate revenue. In intensely competitive environments, structural revenue constraints may limit the financial sustainability gains achievable through governance improvement alone, suggesting that governance improvements may need to be complemented by revenue diversification strategies in highly competitive market contexts.

Table 5

Moderation Analysis Results (PROCESS Model 2): Effects of Regulatory Intensity and Market Competition on the Governance–FSI Relationship

Variable/Component	Indicator/Statistic	Value
Overall Model Fit	R ²	0.37
	F-statistic	21.96
	Degrees of Freedom	(7, 264)
	Significance Level	p < .001
Regulatory Intensity (Moderator)	Unstandardized Coefficient (B)	0.08
	Standard Error (SE)	0.02
	t-value	3.51
	Significance Level	p < .001
	95% Confidence Interval	0.03 – 0.12
	Moderating Effect	Positive (amplifying effect)
Market Competition (Moderator)	Unstandardized Coefficient (B)	-0.11
	Standard Error (SE)	0.03
	t-value	-3.31
	Significance Level	p < .001
	95% Confidence Interval	-0.18 – -0.05
	Moderating Effect	Negative (attenuating effect)
Overall Interpretation	Regulatory Influence	Strengthens governance–FSI relationship
	Competition Influence	Weakens governance–FSI relationship
	Implication	Context matters: governance effects depend on external environment

Note: FSI = Financial Sustainability Index.

4.3 Qualitative Findings: Mechanisms of Governance Effects

The qualitative interviews provided rich contextual evidence of the mechanisms through which governance capability affects financial sustainability. Participant 2, a school principal with ten years of experience, described the operational impact of governance structures: *“Good governance structures do go a long way in determining the level of financial stability of a school. Costs can easily be controlled and planning is made easier when there are clear policies, accountability mechanisms and regular financial reviews. Schools with poor governance usually lack financial control, yet those with good governance are able to maintain their operations more easily over time”* (School Principal, 24th August 2025). This narrative directly illustrates the Tuckman–Chang model's prediction that governance capability reduces financial vulnerability by improving oversight and accountability.

Participant 6, a bursar with nine years of experience, articulated the relationship between governance practices and financial sustainability in operational terms: *“Good financial administration and practices of good governance are the key to sustainability in our private schools. It enhances transparency and assists in making informed financial decisions where there are proper budgeting, monitoring and reporting systems. I have noticed that schools especially private schools with good governance and financial management practices are more disciplined in their financial practices and this largely contributes to their abilities to remain sustainable in the long run”* (Bursar, 24th August 2025). This observation directly illustrates Bowman's (2011) framework: governance capability enables the efficient deployment of financial resources that underlies long-term financial capacity.

Participant 13, a school owner with thirteen years of experience managing a combined school, highlighted the instrumental role of specific governance practices: *“Governance and financial management capability is one of the major factors in financial sustainability. The fact that we have structured financial policies and an auditing routine in our private school means that we have been able to keep our resources in check. Unless governance and financial management are properly managed, it is extremely hard to monitor performance or thwart inefficiencies, which can impact the financial position of the school negatively”* (School Owner, 24th August 2025). This testimony illustrates the strategic intelligence function of governance, enabling informed decision-making and proactive problem identification.

Participants from schools with weaker governance arrangements provided equally informative accounts of the consequences of governance deficits. Participant 1, a school owner, described the impact of informal pricing and financial management: *“At our school, we aim at keeping tuition fees at a level that is affordable to the parents but we do not have a well-organised and consistent financial policy. Financial decisions are reactive rather than strategic, and this slackness places a financial burden on the institution that hinders our ability to maintain steady fiscal stability in the long term”* (School Owner on 24th August, 2025). This narrative illustrates how the absence of governance structures

creates financial vulnerability by preventing the strategic financial planning that governance-capable schools use to navigate revenue uncertainty.

4.4 Discussion

The finding that governance and financial management capability is positively and significantly associated with financial sustainability ($r = 0.449$; $p < .001$) is consistent with the theoretical predictions of both the Tuckman–Chang (1991) model and Bowman's (2011) framework, and aligns with empirical evidence from Kenya (Abong & Ombaba, 2018), Malaysia (Cheuk, 2021), Zimbabwe (Chiwodza et al., 2023), Malawi (Batizani, 2026), and the broader corporate governance literature (Alshareef & Sulimany, 2024). The consistent cross-contextual validation of the governance–sustainability relationship across multiple institutional types and national settings provides strong external validity for the present findings.

The most significant and novel empirical contribution of this study is the quantification of governance capability levels in the Zambian private school sector: mean scores between 1.76 and 1.86 on a five-point scale across all seven governance items represent a severe and pervasive governance deficit that has not previously been documented empirically. This finding has important implications for interpreting the moderate correlation coefficient of 0.449. When governance capability is near-uniformly low across the sector, the observed correlation necessarily underestimates the true potential of governance improvement to enhance financial sustainability, because it captures only the effect of relatively small between-school variations in governance capability rather than the effect of meaningful governance improvement from deficit to adequate capability. Improving governance from the observed mean of approximately 1.8 to an adequate level of 3.5 or above would represent a substantially larger governance capability increase than the between-school variation captured in the correlation analysis, and would be expected to generate correspondingly larger financial sustainability improvements.

The moderation findings provide important nuance to the governance–sustainability relationship. The positive moderating effect of regulatory intensity indicates that regulatory environments can amplify the financial sustainability returns to governance investment: schools in more heavily regulated environments that develop stronger governance capabilities obtain greater financial sustainability benefits than equivalently well-governed schools in less regulated environments. This finding is consistent with the institutional theory argument that regulatory pressure incentivises governance isomorphism (Ostrower & Stone, 2010), creating a virtuous cycle in which regulatory compliance reinforces governance practices that in turn improve financial sustainability outcomes.

The negative moderating effect of market competition is equally important: it indicates that competitive market pressures partially offset the financial sustainability benefits of governance improvement, particularly in environments where competition constrains revenue generation capacity. This finding is consistent with the literature on competitive environments and organisational financial performance (Tran et al., 2025), which suggests that in highly competitive markets, even well-governed institutions may struggle to achieve financial sustainability if structural revenue constraints prevent them from converting governance capability into financial surplus. The policy implication is that governance improvement interventions should be accompanied by complementary strategies to reduce competitive pressures on private schools, potentially through differentiated market positioning, niche development, or collaborative market development among private school associations.

The qualitative evidence provides crucial contextual depth to the quantitative findings, revealing the specific mechanisms through which governance capability affects financial sustainability in practice. The accounts of school administrators consistently identified three governance mechanisms as most influential: structured financial policies that provide decision-making frameworks and accountability standards; regular monitoring and reporting systems that generate the financial intelligence needed for informed decision-making; and clear oversight arrangements that prevent resource misallocation and ensure financial discipline. These mechanisms correspond directly to the governance dimensions identified in the theoretical literature as most important for financial sustainability: policy clarity (Ostrower & Stone, 2010), information quality (Handayani et al., 2023), and accountability effectiveness (Herman & Renz, 2000).

The finding that the great majority of schools lack even basic governance structures, with mean governance scores below 2.0 across all items, represents the most critical policy implication of this study. The gap between current governance capability levels and the adequate level required to meaningfully improve financial sustainability is large enough to require systematic external support rather than purely internal capacity development. School administrators often lack the governance knowledge, financial management expertise, and institutional resources needed to develop adequate governance systems independently, particularly in smaller owner-managed schools. This capacity gap provides the strongest possible justification for policy intervention in the form of governance capability building support, facilitated by the Ministry of Education, private school associations, and development partners.

V. CONCLUSION & RECOMMENDATIONS

5.1 Conclusion

This study provides the first empirical investigation of the governance and financial management capability–financial sustainability relationship in private primary and secondary schools in Zambia, generating findings of significant theoretical, policy, and practical importance. The moderate but significant positive relationship between governance capability and financial sustainability ($r = 0.449$; $p < .001$), confirmed through both quantitative analysis of 272 survey respondents and qualitative interviews with 15 experienced school administrators, establishes that strengthening governance and financial management capability is a meaningful and high-return financial sustainability intervention for private schools in Lusaka Province. The severe governance deficits documented across the sector, with all governance items recording mean scores below 2.0 on a five-point scale, identify the critical scale of the governance improvement challenge facing the sector. H3 is supported. The significant moderating effects of regulatory intensity (positive) and market competition (negative) provide important boundary condition evidence that enriches theoretical understanding of when and how governance capability generates financial sustainability returns.

5.2 Recommendations

Private school proprietors and administrators should prioritise the development of formal financial governance structures, even in small and resource-constrained institutions. The minimum governance infrastructure required to meaningfully improve financial sustainability should include: a written financial management policy covering budgeting procedures, expenditure authorisation, cash handling, and financial reporting; a regular budget monitoring cycle of at least quarterly reviews comparing actual against planned income and expenditure; basic internal controls covering cash management, fee collection, and expenditure authorisation; and annual financial statements reviewed by an independent person or committee. School governing bodies should be structured to include at least one member with formal financial management expertise, that board financial expertise significantly predicts financial sustainability. Where schools lack governing bodies with appropriate expertise, private school associations should facilitate peer governance support networks that allow school administrators to share financial management knowledge and practices.

The Ministry of Education should develop minimum governance standards for private schools, including requirements for written financial management policies, annual financial statements, and periodic budget review mechanisms. These standards should be proportionately designed to reflect the size and resource constraints of private primary and secondary schools, avoiding the bureaucratic burden that identify as potentially counterproductive in educational governance reform. The Ministry should provide accompanying technical assistance to help schools implement these governance standards, potentially through ZOPSA and other private school associations that have existing channels of communication with the sector. Development partners and education-focused NGOs should prioritise governance capacity building for private schools in Zambia as a financial sustainability intervention, given the evidence from this study that governance deficits are both severe and prevalent across the sector. Capacity building programmes should focus on practical governance skills, financial management tools, and peer learning networks rather than formal training alone, recognising the practical constraints facing owner-managed private schools.

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