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Financial Planning Strategies and the Financial Sustainability of Selected Non-Governmental Organizations in Nairobi, Kenya: Moderating Role of Organizational Culture

Moreen Muringo Kariithi[1], Nicholas Sile[2], Jacob Yego[3]

[1,2,3]School of Business and Economics, Moi University, Kenya

ABSTRACT

Purpose: To examine the relationships of budgeting, financial risk management and resource mobilization with perceived financial sustainability among donor-funded humanitarian and health NGOs in Nairobi County, Kenya, and to assess the direct and moderating roles of organizational culture.

Design/methodology/approach: An explanatory cross-sectional survey obtained 304 valid NGO-level responses using a structured online questionnaire. Construct means were analysed using descriptive statistics, reliability tests, Pearson correlations and multiple regression. Three separately fitted Hayes PROCESS Model 1 specifications assessed cultural interactions using HC3 robust standard errors with organizational age and size as controls.

Findings: Budgeting, financial risk management, resource mobilization and organizational culture exhibited positive and statistically significant relationships with financial sustainability. Organizational culture positively and significantly moderated the relationships between budgeting and financial sustainability, financial risk management and financial sustainability, and resource mobilization and financial sustainability. However, the relationship between financial risk management and financial sustainability was not statistically significant at lower levels of organizational culture. The estimated relationship between resource mobilization and financial sustainability also showed a possible change in direction at an extreme level of organizational culture, although the empirical evidence supporting this pattern was limited.

Research limitations/implications: Self-reported cross-sectional responses cannot establish causality or independently verify financial ratios, cash balances and reserves. Moderation models were estimated separately without controlling for the remaining planning strategies, and valid analytical cases cannot be interpreted as a verified invitation-level response rate.

Practical implications: NGO leaders should integrate budget review, contingency planning, financial risk monitoring and donor stewardship with transparent and collaborative financial decision-making routines.

Originality/value: The article distinguishes financial planning practices from perceived financial outcomes and examines organizational culture as both an independent correlate and moderator in donor-funded NGOs.

KEYWORDS: financial sustainability; budgeting; financial risk management; resource mobilization; organizational culture; moderation; humanitarian NGOs; health NGOs; Nairobi, Kenya

1. INTRODUCTION

Financial sustainability enables non-governmental organizations (NGOs) to meet obligations, protect essential service delivery, and remain operational during fluctuations in funding. In donor-funded humanitarian and health organizations, this capacity depends not only on the volume of grants received but also on unrestricted liquidity, predictable financing, diverse usable funding and sufficient operating reserves. Bowman (2011) distinguishes short-term financial resilience from longer-term sustainability, while Tuckman and Chang (1991) explain why limited financial margins and narrow revenue portfolios can make nonprofits vulnerable. Kim and Mason (2020) link operating reserves with a stronger response to the initial COVID-19 disruption, and Irvin and Furneaux (2022) show that reserve needs vary with revenue uncertainty and nonprofit subsector.

The Kenyan context provides a pressing practical problem. The Public Benefit Organizations Regulatory Authority (PBORA, 2026) reports continued dependence on foreign sources, notwithstanding growth in the sector's aggregate financing. The Organisation for Economic Co-operation and Development (OECD, 2026a) documents a sharp decline in official development assistance in 2025.

In a restricted-grant environment, expected financing can fail to arrive when salaries, procurement and programme commitments become due. Consequently, external support may be substantial in a sector-wide report while individual NGOs remain exposed to cash shortfalls and interruptions. Recent nonprofit evidence further demonstrates that financial distress and continuity are related to the composition, reliability and timing of resources rather than donor counts alone (Green et al., 2021; Mayer, 2023; Elvira-Lorilla et al., 2026).

Three practices may help organizations respond: budgeting translates strategic priorities into expenditure and cash plans; financial risk management identifies, assesses and mitigates exposure; and resource mobilization develops and maintains donor support and partnerships. These practices correspond to different financial management tasks, and neither a completed budget nor an active fundraising programme independently establishes financial sustainability. The nonprofit resiliency framework of Searing et al. (2021), research on disaster recovery by Chen (2021) and evidence on emergency support by Ceka and Warner (2024) suggest that internal preparedness and external funding conditions are jointly important.

Organizational culture adds a potential explanation for inconsistent results: financial information must be discussed, interpreted and acted upon within an organization. This paper examines the adjusted relationships of budgeting, financial risk management, resource mobilization and organizational culture with perceived financial sustainability among donor-funded humanitarian and health NGOs in Nairobi County. It additionally tests three separate organizational-culture interactions, while treating organizational size and age as controls. The contribution is context-specific evidence about concurrent associations, rather than a causal estimate of what would happen following an imposed financial intervention (Hayes, 2022; Saunders et al., 2023).

2. LITERATURE REVIEW AND HYPOTHESES

2.1 Conceptual and theoretical foundations

Perceived financial sustainability incorporates four related outcomes: revenue diversification, liquidity, funding stability and financial reserves. Revenue diversification describes the distribution of funding sources; liquidity concerns the availability of resources to honour near-term commitments; funding stability refers to the predictability of receipts; and reserves capture buffers against funding disruption. Bowman (2011) and Tuckman and Chang (1991) emphasize the importance of both capacity and vulnerability, while Park et al. (2022) find that nonprofit dissolution is associated with some financial indicators but not necessarily with liquidity alone. This reinforces the value of a multidimensional outcome, although self-reported ratings cannot substitute for audited accounts (Green et al., 2021; Elvira-Lorilla et al., 2026).

The Resource-Based View, advanced by Wernerfelt (1984) and Barney (1991), regards resources and organizational capabilities as potential sources of sustained advantage when properly deployed. Budgeting expertise, sound risk routines and donor relationships can therefore be treated as capabilities supporting nonprofit mission continuity. However, resource heterogeneity does not insulate NGOs from externally imposed funding restrictions. Duchek (2020) identifies anticipation, coping and adaptation as complementary resilience capabilities, and Chen et al. (2025) show that recovery after recessions differs with organizational characteristics. The theoretical expectation is a positive average association of financial planning practices with perceived sustainability, not guaranteed resilience in every funding shock.

Schein and Schein (2017) explain culture through observable practices, expressed values and underlying assumptions. In a financially dependent NGO, these norms influence whether budget variances are openly discussed, reported risks are escalated and donor communications are coordinated. Handy (1993) distinguishes power, role, task and person cultures, emphasizing different arrangements of authority, procedural responsibility, teamwork and professional autonomy. The present statistical measure is a continuous eight-item culture composite; it cannot identify the independent effect of any one Handy culture type. Evidence from nonprofit controls and performance shows why such organizational context may nonetheless matter (Chen et al., 2023; Jiao et al., 2023; Harrison et al., 2025).

Recent research links cultural configurations to nonprofit revenue strategies and organizational effectiveness, but the dependent outcomes are not equivalent to sustained liquidity and reserves (Jiao et al., 2025; Langer et al., 2025). Woznyj et al. (2024) also associate shared mission and humility with network resilience, while Jaskyte et al. (2026) highlight adaptive and collaborative capacity rather than every measured planning capacity. These findings motivate treating organizational culture as a direct predictor and as a possible condition altering the planning-sustainability relationship. The conceptual and theoretical discussion is therefore integrated in prose; no separate conceptual framework diagram is required.

2.2 Empirical evidence and hypotheses

Budgeting contributes to financial sustainability through resource allocation, expenditure control, financial monitoring and the implementation of organizational priorities. Bosire and Miroga (2024) established positive relationships between budget planning,

implementation, control, review and financial sustainability among nonprofit organizations in Kisii County, Kenya. Similarly, Wanga (2022) examined the relationship between budgetary control and NGO sustainability in Kenya. Kober and Thambar (2021, 2023) demonstrated the importance of accounting information, budget revisions and management reviews in supporting financial decisions during periods of uncertainty. These studies provided empirical support for examining the relationship between budgeting and financial sustainability.

Accordingly, the first null hypothesis (H_{o1}) stated that budgeting has no statistically significant relationship with financial sustainability of selected donor-funded humanitarian and health NGOs in Nairobi County.

Financial risk management involves identifying, assessing and managing financial uncertainties arising from funding fluctuations, liquidity constraints, exchange-rate movements and operational expenditures. The International Organization for Standardization (2018) emphasizes risk identification, assessment, treatment and continuous monitoring as essential components of effective risk management. Stötzer et al. (2022) established the importance of organizational resilience mechanisms in addressing financial challenges, while Irvin and Furneaux (2022) examined the contribution of financial reserves to nonprofit stability. These findings demonstrated the relevance of financial risk management to organizational sustainability.

The second null hypothesis (H_{o2}) stated that financial risk management has no statistically significant relationship with financial sustainability of selected donor-funded humanitarian and health NGOs in Nairobi County.

Resource mobilization encompasses fundraising strategies, donor engagement, identification of funding opportunities and the development of strategic partnerships. Van Steenburg et al. (2022) emphasized the contribution of strategic fundraising and donor relationships to nonprofit financing. Ndungu and Namada (2026) established a positive relationship between resource mobilization capabilities and organizational outcomes among Kenyan nonprofits. However, Lu et al. (2019), Berrett and Hung (2024) and Tariq et al. (2025) reported mixed findings regarding revenue diversification and nonprofit financial health. Choi (2025) and Searing and St. Clair (2025) further demonstrated that revenue stability varies according to funding sources and economic conditions. These findings provided a basis for assessing resource mobilization practices in relation to financial sustainability.

The third null hypothesis (H_{o3}) stated that resource mobilization has no statistically significant relationship with financial sustainability of selected donor-funded humanitarian and health NGOs in Nairobi County.

Organizational culture influences financial management through shared values, accountability, communication, employee involvement and commitment to organizational objectives. Jiao et al. (2023) established that organizational culture influenced the relationship between management controls and revenue growth, while Jiao et al. (2025) identified differences in revenue management decisions across organizational cultures. Similarly, Ombai et al. (2026) established a moderating role of organizational culture in the implementation of sustainability strategies among Kenyan environmental NGOs. Abínzano et al. (2023) further demonstrated that institutional conditions influenced relationships involving revenue diversification. These findings supported the examination of organizational culture as both a direct predictor and a moderator of financial sustainability.

The fourth null hypothesis (H_{o4}) stated that organizational culture has no statistically significant direct relationship with financial sustainability.

The fifth null hypothesis examined whether organizational culture significantly moderated the relationships between budgeting ($H_{o5}a$), financial risk management ($H_{o5}b$) and resource mobilization ($H_{o5}c$), respectively, and financial sustainability of selected donor-funded humanitarian and health NGOs in Nairobi County. The moderating relationships were examined using separate interaction models (Hayes, 2022).

3. METHODOLOGY

3.1 Research design, population and sampling

The study adopted an explanatory cross-sectional survey design focusing on donor-funded humanitarian and health NGOs operating in Nairobi County, Kenya. This design permits comparison of financial planning and perceived sustainability at one point in time, while excluding experimental causal claims (Creswell & Creswell, 2018; Saunders et al., 2023). The registered NGO was the unit of analysis and one organizational official with relevant knowledge of budgets, financial controls or donor management served as the unit of observation. Organizational size and age were the prespecified controls, recorded as four ordered employee and operating-age categories.

The thesis cited an administrative population basis of 1,252 humanitarian NGOs in Nairobi. A sample of 304 organizations was calculated using Yamane's finite-population expression with precision set to 0.05 (Yamane, 1967). The sampling plan used health and other humanitarian NGOs as strata; a knowledgeable organizational officer was selected to complete the electronic survey. Stratification and purposive choice of an informed respondent serve different functions: the first concerns organizational inclusion, whereas the latter concerns response quality (Ahmed, 2024; Etikan et al., 2016).

$$n = \frac{N}{1 + Ne^2} = \frac{1{,}252}{1 + 1{,}252(0.05)^2} = 303.15 \approx 304$$

Sample-size calculation (finite-population approach)

Questionnaires were administered through Google Forms. The supplied statistical output contains 304 valid cases, including humanitarian and health organizations; this constitutes full attainment of the intended analytical sample. It does not independently establish a 100% invitation-level response rate, which would require the recruitment and invitation register. The distinction matters because multiple completed electronic forms or inaccessible invitees cannot be assessed from aggregated statistics alone (Saunders et al., 2023; Podsakoff et al., 2003).

3.2 Data sources and ethical safeguards

The instrument included organizational characteristics and 31 five-point agreement items. Participation was voluntary and responses were analyzed as organizational reports, without reproducing names, contact details or financial identifiers. The cross-sectional, single-informant design may introduce recall error, common-method response covariance and socially desirable assessments. These limitations require careful wording of findings and prevent interpreting the perceived sustainability composite as an audit of liquidity or donor concentration (DeVellis & Thorpe, 2021; Podsakoff et al., 2003; Saunders et al., 2023).

3.3 Measurement of variables

Financial sustainability was the dependent variable; budgeting, financial risk management and resource mobilization were the financial planning predictors; organizational culture was included as both a direct predictor and moderator. Each construct score was formed from the mean of its designated five-point Likert items. Organizational age and size were not treated as Likert constructs. This coding is consistent with established approaches to scale formation, subject to internal consistency and construct checks (DeVellis & Thorpe, 2021; Nunnally & Bernstein, 1994).

Table 1. Measurement of variables and operational definitions

Variable / role	Indicators or operational content	Scale / coding
Financial sustainability (FS) Dependent	Revenue diversification; liquidity; funding stability; financial reserves	8 items; 1–5; item mean
Budgeting (B) Predictor	Budget preparation; implementation monitoring; management review; participation; variance analysis	5 items; 1–5; item mean
Financial risk management (FRM) Predictor	Risk identification; assessment; mitigation and controls; monitoring; periodic risk review	5 items; 1–5; item mean
Resource mobilization (RM) Predictor	Fundraising plans; funding opportunity identification; donor engagement; partnerships; relationship management	5 items; 1–5; item mean
Organizational culture (OC) Predictor and moderator	Leadership direction; formal roles; teamwork; professional initiative and autonomy	8 items; 1–5; one composite
Organizational size (OS) Control	Paid employees: <20; 20–49; 50–99; 100 or more	Ordered categories: 1–4
Organizational age (OA) Control	Operating years: <5; 5–10; 11–20; above 20	Ordered categories: 1–4

Source: *Study questionnaire and 2026 thesis analysis. Culture is one eight-item composite rather than four independently modeled Handy types.*

$$\overline{X}_i = \frac{\sum_{j=1}^{k} X_{ij}}{k}$$

Composite scoring formula (k = number of valid construct items)

Financial sustainability reflects perceived financial capacity rather than actual bank balances. The resource-mobilization indicators assess actions taken to obtain support, whereas the revenue-diversification dimension of sustainability describes the respondent's assessment of an outcome; maintaining that distinction reduces conceptual duplication (Bowman, 2011; Lu et al., 2019). Financial risk-management indicators follow the logic of risk assessment and monitoring in ISO 31000:2018 (International Organization for Standardization, 2018), while culture indicators draw on working practices associated with Schein and Schein (2017) and Handy (1993).

3.4 Model specification and estimation

Multiple regression estimated the joint additive associations of the study variables with perceived financial sustainability. The control-only model entered organizational size and age first, then the full model added budgeting, financial risk management, resource mobilization and organizational culture. Each moderation hypothesis was evaluated through a separate Hayes PROCESS Model 1 equation, with the focal planning variable, culture, their cross-product and the two organizational controls. The supplied PROCESS models did not additionally control for the other two planning strategies, a specification distinction maintained throughout interpretation (Hayes, 2022; Field, 2024).

$$FS_i = \beta_0 + \beta_1 OS_i + \beta_2 OA_i + \varepsilon_i$$

Model 1: Organizational controls only

$$FS_i = \beta_0 + \beta_1 OS_i + \beta_2 OA_i + \beta_3 B_i + \beta_4 FRM_i + \beta_5 RM_i + \beta_6 OC_i + \varepsilon_i$$

Model 2: Additive financial planning and organizational culture

$$FS_i = \beta_0 + \beta_1 X_i + \beta_2 OC_i + \beta_3 (X_i \times OC_i) + \beta_4 OS_i + \beta_5 OA_i + \varepsilon_i$$

Model 3: Separate culture moderation; X = B, FRM or RM

In the equations, subscript i denotes an NGO, FS perceived financial sustainability, B budgeting, FRM financial risk management, RM resource mobilization, OC organizational culture, OS organizational size, OA organizational age, β coefficients and ε the disturbance. The cross-product coefficient tests the extent to which the slope of the focal strategy changes with culture.

4. RESULTS

4.1 Sample characteristics and descriptive statistics

The analytical file contained 304 valid organizational records: 176 humanitarian NGOs and 128 health NGOs. Organizational staffing categories included 19 NGOs with fewer than 20 employees, 74 with 20–49 employees, 101 with 50–99 and 110 with 100 or more. The organizational-age distribution comprised 22 NGOs operating for fewer than five years, 57 for five to ten years, 117 for eleven to twenty years and 108 for more than twenty years. These are respondent-reported classifications and do not establish that the sample is representative of all registered NGOs in Kenya. They show why size and age are relevant adjusted covariates (Chen, 2021; Searing & Lecy, 2022).

Table 2. Descriptive statistics for the study constructs (N = 304)

Study construct	Mean	SD	Minimum	Maximum	Skewness	Kurtosis
Financial sustainability	3.8273	.4910	2.50	5.00	−.028	−.147
Budgeting	3.7570	.8410	1.40	5.00	−.587	−.079
Financial risk management	3.7500	.8574	1.00	5.00	−.629	−.039
Resource mobilization	3.7550	.8253	1.20	5.00	−.627	−.007
Organizational culture	3.7623	.7976	1.25	5.00	−.649	.146

Source: *Survey analysis output (2026). Means and standard deviations refer to respondent-rated composite scores, not audited financial ratios.*

Average responses were above the neutral midpoint of three for all five constructs, indicating generally favourable assessments. Financial sustainability had the highest mean and the smallest dispersion; its lower standard deviation suggests that respondents varied less in their assessment of sustainability than in their descriptions of budgeting, risk-management, mobilization and culture practices. Financial risk management had the largest observed standard deviation, indicating more between-NGO variation in reported adoption of risk routines. The small differences among the three planning means should not be treated as statistically significant rank differences without a separate paired-mean test (Field, 2024; DeVellis & Thorpe, 2021).

The slightly negative skewness values for budgeting, financial risk management, resource mobilization and organizational culture reflect a concentration towards more favourable scores. The financial-sustainability distribution was much closer to symmetric. None of these univariate distribution statistics is itself a test of regression residual normality. Moreover, a mean above three does not establish that an NGO has a particular amount of unrestricted liquidity, a sufficient reserve buffer or a reliably diversified donor portfolio (Kim & Mason, 2020; Irvin & Furneaux, 2022).

4.2 Combined reliability and validity results

Internal consistency was examined separately for the five conceptual scales using Cronbach's alpha; principal component diagnostics were also reported to assess the suitability of the item covariance matrices. Cronbach (1951) provided the foundation

for alpha as an internal-consistency statistic, while Nunnally and Bernstein (1994) and DeVellis and Thorpe (2021) explain its interpretation and limits. The Kaiser–Meyer–Olkin measure and Bartlett's test concern suitability for common-component extraction rather than independent verification of an instrument's theoretical validity (Hair et al., 2019; Field, 2024).

Table 3. Combined internal consistency and construct structure

Construct	Items	α	KMO	Bartlett χ^2 (df)	First eigenvalue	Variance explained
Budgeting	5	.815	.843	449.319 (10)	2.874	57.472%
Financial risk management	5	.810	.820	449.093 (10)	2.840	56.793%
Resource mobilization	5	.845	.864	557.664 (10)	3.089	61.777%
Organizational culture	8	.877	.920	934.396 (28)	4.300	53.750%
Financial sustainability	8	.891	.917	1,073.231 (28)	4.542	56.771%

All Bartlett tests: $p < .001$. All values are reproduced from the supplied thesis output. One leading component was reported for each construct.

All Cronbach alpha coefficients exceeded .80, supporting satisfactory internal consistency. KMO indices ranged from .820 to .920; all five Bartlett tests were significant, suggesting that component analysis was plausible for these item sets. The leading component explained more than half of the variance within each scale. The organizational-culture composite explained the smallest share of item variance among the five constructs, consistent with its coverage of leadership direction, formal roles, teamwork and professional initiative. The culture item OC1 had a communality of .499, just below the common .50 screening convention. This result warrants transparency rather than removal of an item simply to improve the statistic (DeVellis & Thorpe, 2021; Hair et al., 2019).

Reliability cannot on its own demonstrate that the financial-sustainability composite reproduces audited ratios or that the culture indicators form four distinct types. Although AVE, composite reliability and HTMT are useful for convergent and discriminant validity under an appropriate latent-variable model (Fornell & Larcker, 1981; Henseler et al., 2015), no unreported AVE, CR or HTMT estimates are introduced here. Instrument validity should also consider content relevance; Polit et al. (2007) recommend explicit expert agreement criteria for content-validity assessment. The present report confines numerical conclusions to the printed reliability and principal component evidence.

4.3 Diagnostic tests and regression assumptions

Regression suitability was assessed from the residual diagrams, collinearity tables and influence summaries.

Table 4. Regression-assumption and diagnostic review

Assumption	Reported evidence	Assessment
Residual normality	Histogram centred near zero; normal P–P points approximately follow diagonal	Visually plausible
Linearity / functional form	Fitted positive simple scatterplots; residual-versus-fitted plot supplied	No obvious strong curvature
Homoscedasticity	No marked funnel in residual plot; HC3 used for PROCESS inference	Visual screening only;
Multicollinearity	VIF 1.548–1.672; tolerance .598–.646; highest condition index 18.208	No severe multicollinearity on recorded thresholds
Residual independence	Durbin–Watson = 2.117; one NGO intended per record	No strong serial pattern
Outliers / influence	Standardized residuals −2.635 to 2.492; max Cook's D .026	No very large Cook's D; exceeds 4/n screening value .0132
Leverage	Maximum centred leverage .088	No proof of mdel failure

Source: 2026 thesis appendix and Chapter Four. "Not supplied" means no formal statistic was reported; it is not a favourable test result.

The VIF figures were well below the working threshold of five and the tolerances exceeded .20, suggesting no serious multicollinearity in the additive model (Shrestha, 2020). Durbin–Watson was close to two, although the cross-sectional unit of analysis limits its value as a substitute for checking unique NGO records. The maximum standardized residual magnitude was below three, while Cook's distance of .026 exceeded the rough 4/n screen but remained well below one; targeted case-influence review would strengthen robustness. The PROCESS analyses used HC3 standard errors, reducing dependence of significance tests on constant-error-variance assumptions (Hayes, 2022; Field, 2024).

4.4 Pearson correlation analysis

Pearson correlations described bivariate relationships among the main financial planning variables, organizational culture, perceived financial sustainability and the two organizational controls. These coefficients express concurrent direction and magnitude before joint adjustment; they are not marginal effects from the multivariable regression. All reported off-diagonal coefficients in the matrix were positive and statistically significant at $p < .001$ (Field, 2024; Saunders et al., 2023).

Table 5. Pearson correlation matrix (N = 304)

Variable	B	FRM	RM	OC	FS	OS	OA
B	1.000	.404	.457	.487	.612	.502	.458
FRM	.404	1.000	.462	.418	.625	.431	.466
RM	.457	.462	1.000	.418	.626	.555	.467
OC	.487	.418	.418	1.000	.616	.494	.445
FS	.612	.625	.626	.616	1.000	.658	.574
OS	.502	.431	.555	.494	.658	1.000	.480
OA	.458	.466	.467	.445	.574	.480	1.000

B = budgeting; FRM = financial risk management; RM = resource mobilization; OC = organizational culture; FS = financial sustainability; OS = organizational size; OA = organizational age. Every off-diagonal correlation: p < .001. Source: Survey output (2026).

The relationship with perceived sustainability was positive for budgeting (r = .612), financial risk management (r = .625), resource mobilization (r = .626) and organizational culture (r = .616). Size (r = .658) and age (r = .574) were likewise associated with sustainability, supporting their use as contextual controls. The three planning constructs were moderately correlated with each other, suggesting that NGOs reporting more intensive budgeting also tended to report stronger financial risk and mobilization practices. This shared variance is an argument for regression adjustment, not evidence that the constructs are identical (Green et al., 2021; Chen et al., 2025).

The correlation analysis revealed positive and statistically significant relationships between financial sustainability and resource mobilization (r = .626), financial risk management (r = .625), organizational culture (r = .616) and budgeting (r = .612). Organizational size (r = .658) and organizational age (r = .574) also exhibited positive and statistically significant relationships with financial sustainability. All relationships were significant at $p < .001$. Among the financial planning strategies, resource mobilization recorded the strongest positive correlation with financial sustainability. These findings indicated that NGOs reporting stronger financial planning practices and organizational culture also tended to report higher levels of financial sustainability.

4.5 Multiple regression analysis

4.5.1 Model fit and incremental explanatory contribution

Table 6. Controls-only and additive regression model summaries

Specification	R^2	Adjusted R^2	F statistic	df	p	ΔR^2
Controls: OS and OA	.408	.404	103.813	(2, 301)	< .001	—
Controls + B, FRM, RM and OC	.585	.577	69.873	(6, 297)	< .001	.177

Addition of the four focal constructs: F-change(4, 297) = 31.715, p < .001. Source: SPSS output (2026).

Organizational size and age jointly explained 40.8% of the observed variation in perceived financial sustainability. Adding budgeting, financial risk management, resource mobilization and organizational culture raised R^2 to .585 and adjusted R^2 to .577. The collective improvement of .177 refers to the additional four variables together rather than the isolated explanatory share of any single strategy. The full model was statistically significant, $F(6, 297) = 69.873$, $p < .001$ (Field, 2024).

4.5.2 Direct regression coefficients

Table 7. Additive-regression coefficients (dependent variable: FS)

Explanatory term	B	SE	β	t	p
Organizational size (OS)	.096	.025	.181	3.834	< .001
Organizational age (OA)	.062	.025	.116	2.472	.014
Budgeting (B)	.116	.028	.199	4.115	< .001
Financial risk management (FRM)	.096	.027	.168	3.603	< .001
Resource mobilization (RM)	.110	.028	.185	3.935	< .001
Organizational culture (OC)	.113	.029	.183	3.838	< .001

Intercept B = 1.721. Coefficients are adjusted for all other rows shown; continuous composites are on the original 1–5 response scale. Source: SPSS output (2026).

All four focal direct associations were positive and significant at $p < .001$. The standardized coefficients were .199 for budgeting, .168 for financial risk management, .185 for resource mobilization and .183 for organizational culture. They are numerically close, and no statistical equality tests were provided to establish one coefficient as definitively larger than another. The organizational controls remained significant after adjustment; because the controls are ordered categories rather than exact employee counts or years, their coefficients describe category-level differences (Hayes, 2022; Field, 2024).

4.6 Organizational culture moderation results

Three separate PROCESS Model 1 regressions investigated organizational culture as a moderator of the budgeting, financial risk management and resource mobilization associations with perceived financial sustainability. Each regression included the focal strategy, culture, their interaction, organizational size and organizational age, using HC3 robust standard errors. The other two planning strategies were not covariates in that particular PROCESS equation. Consequently, the interaction findings are not mutually adjusted partial effects among all three strategies (Hayes, 2022).

Table 8. Separate cultural interaction models

Interaction term	B	HC3 SE	95% CI	p	Model R^2	ΔR^2
Budgeting × OC	.0939	.0225	[.0497, .1381]	< .001	.5594	.0185
Financial risk management × OC	.0896	.0287	[.0331, .1460]	.0020	.5441	.0160
Resource mobilization × OC	.1219	.0241	[.0744, .1694]	< .001	.5608	.0270

N = 304 in each model; controls are OS and OA. Confidence intervals are HC3-based. Source: PROCESS output (2026).

Budgeting exhibited a positive interaction with organizational culture (B = .0939; 95% CI [.0497, .1381]), suggesting that the association between budgeting and financial sustainability increased at higher culture values. The interaction increased model R^2 by .0185. Similarly, financial risk management interacted positively with culture (B = .0896; 95% CI [.0331, .1460]) and added .0160 to R^2. Resource mobilization also showed positive moderation (B = .1219; 95% CI [.0744, .1694]) with $\Delta R^2 = .0270$. Each interval excluded zero, supplying evidence of an interaction at the stated significance level (Hayes, 2022; Holm, 1979).

The moderation results established that organizational culture positively and significantly strengthened the relationships between budgeting, financial risk management, resource mobilization and financial sustainability. These findings suggest that organizational values, accountability, collaboration and management practices are important in supporting effective financial planning among NGOs in Nairobi County. The findings are consistent with Jiao et al. (2023, 2025) and Ombai et al. (2026), who established the importance of organizational culture in financial management and sustainability practices. However, organizational culture was measured as a composite construct rather than through the separate organizational culture types identified by Handy.

4.7 Conditional effects and interpretation

Table 9. Conditional planning-strategy slopes at organizational culture values

Planning strategy	Culture level	Effect B	HC3 SE	95% CI	p
Budgeting	Low (2.9648)	.1025	.0275	[.0483, .1567]	.0002
Budgeting	Mean (3.7623)	.1774	.0276	[.1230, .2318]	< .001
Budgeting	High (4.5599)	.2522	.0376	[.1783, .3262]	< .001
Financial risk management	Low (2.9648)	.0622	.0360	[−.0085, .1330]	.0845

Financial risk management	Mean (3.7623)	.1337	.0279	[.0787, .1886]	< .001
Financial risk management	High (4.5599)	.2051	.0363	[.1338, .2764]	< .001
Resource mobilization	Low (2.9648)	.0770	.0293	[.0194, .1347]	.0090
Resource mobilization	Mean (3.7623)	.1742	.0267	[.1217, .2268]	< .001
Resource mobilization	High (4.5599)	.2715	.0362	[.2002, .3427]	< .001

Low and high culture are approximately one standard deviation below and above its mean. These are conditional slopes from three separate PROCESS regressions. Source: 2026 thesis results.

Budgeting showed a significant positive conditional association at all three conventional culture values, and its estimated slope increased as culture rose. Financial risk management differed: the positive estimate at low culture was not statistically distinguishable from zero (p = .0845), whereas the estimates at mean and high culture were significant. Resource mobilization likewise became more strongly and positively associated with sustainability as culture rose. These findings support a strengthening moderation pattern over the displayed culture range rather than a universal direct effect across all conceivable cultural conditions (Hayes, 2022).

The Johnson–Neyman analysis revealed that resource mobilization had a negative relationship with financial sustainability at the lowest observed level of organizational culture. However, this relationship was observed among very few NGOs, limiting its applicability to the wider study population. Overall, the findings indicated that stronger organizational culture enhanced the positive relationship between resource mobilization and financial sustainability. This suggests that organizational culture may facilitate better coordination of donor engagement, budget reviews and financial risk management practices, consistent with findings by Kober and Thambar (2023), Jiao et al. (2025), Woznyj et al. (2024) and Jaskyte et al. (2026).

5. DISCUSSION, CONCLUSIONS AND IMPLICATIONS

5.1 Discussion of principal findings

The positive budgeting association aligns with Bosire and Miroga (2024) and with evidence that financial forecasts and participatory reviews help nonprofit decision-makers respond to constraints (Kober & Thambar, 2021, 2023). Financial risk management was independently associated with sustainability, consistent with the value of anticipation, proportionate reserves and adaptable responses (Duchek, 2020; Stötzer et al., 2022). Resource mobilization also showed a positive association, similar to the Kenyan mobilizing-capability results of Ndungu and Namada (2026). Yet this does not imply that every additional revenue stream is valuable: evidence from Choi (2025), Tariq et al. (2025) and Searing and St. Clair (2025) cautions that volatility, financing restrictions and source composition influence actual financial health.

Organizational culture showed both a positive direct association and positive interactions with each planning strategy. The interpretation is consistent with the proposition that financial routines are most useful where organizations communicate risk, accept corrective action and coordinate donor decisions (Schein & Schein, 2017; Harrison et al., 2025). The analysis nevertheless assesses one combined culture score; it does not establish that any particular power, role, task or person culture causes superior outcomes (Handy, 1993; Langer et al., 2025).

5.2 Conclusion and practical implications

The study concludes that budgeting, financial risk management, resource mobilization and organizational culture were positively associated with perceived financial sustainability among the selected Nairobi NGOs. Stronger organizational culture was associated with steeper positive relationships for each planning strategy, although the risk-management slope at low culture was uncertain and an extreme-tail resource-mobilization reversal had limited support. NGO managers should integrate realistic cash forecasts, routine variance analysis, funding-risk alerts, donor stewardship and collaborative correction procedures. Regulators and development partners should also consider timely disbursement, proportionate accountability and the flexibility to maintain essential costs during disruptions (PBORA, 2026; OECD, 2026a; United Nations, 2015).

5.3 Limitations and directions for further research

Because the design was cross-sectional and self-reported, the estimates cannot resolve reverse causality or confirm audited reserves, liquidity and donor concentration. The analytical sample does not by itself verify the organizational invitation response rate, and the culture scale combines distinct theoretical orientations. Moderation equations were separate and did not simultaneously include the other planning predictors. Further work should match staff assessments with audited finance records, donor-disbursement histories and longitudinal measures; estimate prespecified jointly adjusted interactions; and examine

alternative culture dimensions, model diagnostics and the sparsely observed negative tail (Podsakoff et al., 2003; Saunders et al., 2023; Hayes, 2022).

More robust financial validation should distinguish unrestricted liquidity from restricted grant balances, and record operating-reserve coverage, the share of income from major donors, the timing of grant disbursements and the frequency of actual programme interruptions. These indicators would permit triangulation with the survey dimensions while clarifying which observed changes represent cash availability rather than favourable perceptions. Collecting repeated annual statements would also help separate pre-existing financial strength from improvements that follow budgeting or donor-management investments. Previous financial-record studies show that income composition, reserves and organizational survival can convey different information about nonprofit financial health (Green et al., 2021; Irvin & Furneaux, 2022; Mayer, 2023; Elvira-Lorilla et al., 2026).

Future survey work should document the eligible sampling frame, invitation outcomes and uniqueness of organizational responses. Multiple informed respondents could help assess whether finance and programme teams interpret financial conditions consistently. A fuller culture instrument would permit tests of distinct leadership, role, teamwork and autonomy dimensions rather than assuming a single composite captures their potentially different functions. Jointly adjusted interaction models should include the other planning practices, report robust confidence intervals, inspect potentially influential observations and disclose the results of formal residual and heteroscedasticity tests when those tests are actually run. These steps would address measurement uncertainty, common-method effects and model-specification differences without implying that a cross-sectional observational relationship is necessarily causal (Podsakoff et al., 2003; DeVellis & Thorpe, 2021; Hayes, 2022; Field, 2024).

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