#### Examining the Effect of Financial Control Mechanisms on the Financial Sustainability of Selected Local Government Authorities in Tanzania: The Moderating Effect of Good Governance

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#### Abstract

This study aimed at examining the effect of financial control mechanisms on the financial sustainability of selected Local Government Authorities in Tanzania, examining good governance as a moderating variable in knowledge advancement. The direction of the study was given by the Institutional and the Agency theories. Explanatory research design was employed. The gathered data was subjected to inferential and descriptive analysis techniques. Data was collected through the use of questionnaire. Structural Equation Modelling was used for data analysis. The results revealed that financial control has positive and significant relationships with financial sustainability. It suggests that effective financial control is critical for ensuring resources availability and efficient utilization, thereby enhancing local government operations' sustainability. Multi-group analysis confirmed positive moderation of good governance of a path of financial control and financial sustainability. The practical implication of the findings is that, institutions that promote effective financial control contribute to their long-term financial sustainability, and that prioritizing good governance reforms in local government leads to better financial outcomes.

*Keywords:* Financial Control, Financial Sustainability, Local Government Authorities in Tanzania.

# **1.0 INTRODUCTION**

Financial sustainability is the capacity of LGAs to continuously fulfill their financial commitments to creditors and service delivery requirements without increasing debt or raising taxes over the short- and long-term (Akeel et al. 2019; Bolívar, et al., Jaafar, et al., 2016; Caruana, et al., 2019; CICA 2010; Hajilou, et al., 2018; Wallstedt et al. 2014; Aneta, et al., 2021). Maintaining accountability when allocating public funds and providing services to local communities are crucial for LGAs. Service (Galera et al. 2016), revenue structure (Hajilou, et al., 2018), and debt sources (Galera, et al., 2019) are the three key factors that determine an LGA's long-term viability. Due to their limited autonomy and reliance on government budget allocation, Local Government Authorities

(LGAs) have limited discretion over their revenue structure and capacity to issue debt (Caruana et al. 2019). Indeed, restoring a sustainable balance between revenue and expenditure and debts remains a huge challenge, prompting financial sustainability to become a prominent idea in public organizations and businesses (Augustine 2022).

The Local Government Authorities are considered to be agents of the central government and are tasked with dealing largely with issues that affect the local population of a given district or location. Sikander (2005) one of the most significant factors for LGAs to consider while fulfilling their functions is financial sustainability (Fellows, *et al.*, 2022) Local governments' function as the primary public administrative authorities for a certain geographic area or region within a country. They offer local political representation and support the social, cultural, and economic growth of the communities they serve (Thapa, 2020; Shah & Shah, 2006). They are frequently referred to be the level of government that is "closest to the people" because they typically represent the lowest level of the governmental structure (Beer and Prance, 2012). By delivering services to the residents of their respective areas, Local Governmental Authorities (LGAs) serve in this position as the central government's representative. These local government stands as principal.

Agency Theory postulates that the agent and principal are both expectationfocused, that the agent's actions have an external impact on the principal's welfare, and that the agent has discretionary freedom due to asymmetric information (Eisenhardt, 1989). A potential goal conflict arises from pursuing self-interests (Magasi, et al., 2020). Accordingly, suitable precautions must be taken to keep an eye out for any opportunistic actions by the agent (Jensen & Meckling, 1976; Magasi, et al., 2020; Panda & Leepsa, 2017). By implementing the contracted agreement with its principal, the organization hopes to ensure that the agent is not acting in conflict with the terms of their agreement by putting in place financial control as a mechanism of ensuring utilization of financial resources. However financial monitoring and financial planning are deployed to address agency problem but for this study have been used as the control variables.

Therefore, the need to analyze the effect of Financial Control (FC) on Financial Sustainability (FS) particularly for the selected local government authorities in Tanzania was triggered by the fact that LGAs had numerous internal financial sources. However, they were unable to collect the intended TZS 76.59 billion. Seventy-six (76) LGAs out of the 184 LGAs failed to allocate and contribute the necessary proportion of TZS 22.37 billion to development initiatives (URT 2022). Furthermore, there was a theft of funds in the LGAs, where TZS 435.02

billion was spent to buy more building materials than were necessary, TZS 898.85 billion was wasted, and TZS 3.5 billion was borrowed but not paid back on time (URT 2022). These are challenges facing selected LGAs regardless of the number of efforts established by the Government of Tanzania to improve To improve service delivery, the Government of performance of LGAs. Tanzania embarked from the 1990s on major decentralization reforms under the motto of "decentralization by devolution" (popularly referred to as D by D). Dby-D refers to the transfer of power, authority, and resources from the central government to LGAs (Harris, Domingo, Sianga, Chengullah & Kavishe 2011; Hoffman & Gibson, 2006; Kessy & McCourt 2010; Mdee & Thorley 2016; Ndlovu & Ngenda 2006; Pallotti 2008). This was initiated through the umbrella of reforms to make the LGAs more accountable for resource delivery in their areas of jurisdiction. The reforms were carried out in LGAs through the Local Government Reform Programme (LGRP) which was part of a broader programme among the four key public sector reform programmes in Tanzania. The other three reform programmes included the Public Service Reform Programme (PSRP), Legal Sector Reform (LSR) and Public Financial and Management Reform (PFMR). All four programmes were part of a broader policy and strategic framework aimed at enhancing accountability, citizen participation, transparency, and integrity in the use of public resources and to improve service delivery (Mdee & Thorley2016).

Furthermore, several studies have been carried out in LGAs to identify the best methods for enhancing LGAs' financial sustainability (Ameer et al., 2019; Masenga, 2021; Mbogo, 2022; Ocholla, *et al.*, 2022; McQuestin, 2021; Kessy, 2020)). Crucial managerial components of analysis are either absent or dispersed and understudied, specifically the determinants of financial sustainability such as, financial control and its effects on financial sustainability of LGAs in Tanzania (McQuestin, 2021). However, to the best of the researcher's knowledge, little research has been conducted globally or specifically in Tanzania to look at the effect of financial control on the financial sustainability of LGAs as variables of agency theory using good governance (Institutional Theory) as a moderating variable in predicting financial sustainability. As a result, this justifies carrying out this study to fill the gaps.

This study builds on the Agency Theory and applies the Institutional Theory to moderate the relationships between Financial Control (FC) and Financial Sustainability (FS) based on the fact that a good governance practice enables increased efficiency by lowering agency costs through facilitating access to valuable resources through resource supply (Aguilera & Cuervo Cazurra, 2004). The concept of good governance has been widely applied in the establishment of

development programs at its valuable undertaking; a thorough analysis is necessary to understand its significance, as it arises from the historical context in which numerous governments faced crises related to development and legitimacy as a result of poor governance. Therefore, it was hypothesized that:

- *H*<sub>1</sub>: Financial Control has positive effect on financial sustainability of selected LGAs in Tanzania
- *H<sub>2</sub>: Good governance positively moderates the effect of the financial control on financial sustainability of selected LGAs in Tanzania* 
  - Financial Control
     Financial

     Control Variables
     Financial

     Financial Monitoring
     Sustainability

     Financial Planning
     Good Governance

#### 1.1 Conceptual Framework

#### 2.0 METHODOLOGY

This study used positivism, which makes use of empirical data, and a deductive approach (Scotland, 2012). Saunders et al. (2009) used an explanatory design in conjunction with a survey mechanism. 800 accountants and auditors from Tanzania's six regions of Dar es Salaam, Tanga, Arusha, Mwanza, Mbeya, and Dodoma, precisely city councils and municipals, were the population of interest. Tanzania is divided into numerous LGAs, such as the Lake Zone, Coastal Zone, Central Zone, Northern Zone, and Southern Highlands, whose urban environments were intentionally chosen to balance each area. They also act as the primary public administrative authorities for a particular region or geographic area within a nation, providing local political representation and fostering the advancement of the region's social, economic, and cultural spheres (Thapa, 2020; Shah and Shah, 2006). A simple random technique was employed to select 330 respondents, constituting the sample size. Jackson (2003) suggests that an optimal sample size to a parameter is 15:1 or at least 10:1, and suggests that N: q be used as a general guideline when using Structural Equation Modelling (SEM). N and q represent the number of respondents for each parameter and the study's parameter, respectively. In all, eighteen (30) parameters were used. Thus, the

sample size was 300 accountants and auditors according to the 10:1 rule. However, normally researchers increase the sample size by 10% to cover for lost questionnaires, uncooperative and untraced respondents especially when participation is voluntary and anonymous, and also data collection is done by a way of self-administered survey questionnaire (Kish 1965). In that regard, addition of 10% of the calculated sample size of 300 sums up to an absolute sample of 330 individuals. Therefore, 330 individuals sampled from the target population was the sample size for the study. Kothari and Gard (2014) claim that proportional allocation makes it possible to maintain the sample's proportionality to the defined research area.

#### 2.1 Variables

The dependent variable in this study was FS which was measured by six items as adapted from Ejohb et al., (2014). FP was the independent variable which was measured using six items as adopted from Masiega, et al., (2021), Chelingat, *et al.*, (2018) and GG was a moderating variable measured using six items (Amalia et al., 2018, Eckersley et. al., 2018, Sudaryati, et.al. 2023). All these items were measured using a five-point Likert-like scale with items to each of which the respondents replied Strongly disagree (1 point), Disagree (2 points), neutral (3 points), Agree (4 points) or Strongly agree (5 points) as shown in Table 1. The unit of analysis was individual accountants and auditors.

Variable	No of	Code	Measurement items	Measurement	Sources
Financial control	6	FC	FC1=Segregation of duties FC2 =Review transactions FC3 =Supervision FC 4=Training FC5= Adhere to provision FC6 = Follow up actions	Five-point Likert scale. 1 =Strongly disagree 2 = Disagree 3 = Neutral 4 =Agree 5= Strongly agree	Mbilla, <i>et al</i> (2020), Hussein Umar et al. (2018)
Financial sustainabilit y	6	FS	FS1=Surplus FS2=Positive operating margin FS3=Funding diversified FS4=Less fixed cost FS5=adequate resources allocation FS6= money for contingencies	Five-point Likert scale. 1 =Strongly disagree 2 = Disagree 3 = Neutral 4 =Agree 5=Strongly agree	Ejohb et al., (2014) Ejoh,N & Ejom P (2014)
Good governance	6	GG	GG1=available website GG2= ethical compliance GG3= regular audit GG4= independent decision making GG5= compliance with laws and regulations GG6= participation	Five-point Likert scale. 1 =Strongly disagree 2 = Disagree 3 = Neutral 4 =Agree 5 =Strongly agree	Amalia et al (2018) Eckersley et., al (2018) Sudaryati, et.al. (2018)

Table 1: Measurement of variables

According to earlier studies, financial sustainability may be impacted by other determinants such as financial planning (Abdulkaddir, 2021; Mahmood et al., 2021; AlQersh, 2021; Abiodun et al., 2020) as well as financial monitoring (Mbilla *et al* 2020; Adegboyegun *et al.*,2020). In order to control the relationship between the dependent and independent variables, certain control variables were used in this study, financial planning and financial monitoring.

# 2.2 Data Analysis

SPSS software version 25 was used in performing descriptive analysis and evaluating Exploratory Factor Analysis (EFA) so as to determine the validity and reliability of constructs as well as evaluating the assumptions of a structural equation model. IBM AMOS software version 23 was used during the construction of measurement and structural models through Confirmatory Factor Analysis (CFA). The relationship between independent and dependent variables was determined to be significant at the 5% level of significance whereby moderation effect was determined using ..... test. Goodness of fit indices with their acceptable threshold level was adapted from Hooper et al. (2008), Gupta (2015), Hair et al. (2006) and Malhotra et al. (2017) as follows: CMIN/DF (X2/df) < 3, RMR < 0.08, GFI > 0.90, CFI > 0.90, NFI > 0.90, TLI > 0.90, RFI  $\geq$  0.90, PCFI  $\geq$  0.50, and RMSEA  $\leq$  0.08. The study employed a variety of indicator statements to quantify good governance, making it a latent construct. In light of this, the study by Awang (2011) issues a warning that the moderation analysis for a model with a latent component is extremely challenging. Additionally, because it may result in issues with model convergence and standard error, the conventional modeling technique employing interaction terms does not apply to latent constructs. Instead, Multi-Group CFA was used in the study to examine the influence of the moderator variable's latent nature. As a result, this study examined H2 obtained using a step-by-step Multi-Group CFA approach.

# 3.0 FINDINGS AND DISCUSSION

# **3.1 Demographic profile of respondents**

The study used 318 respondents to determine the influence of financial control on financial sustainability via good governance. To answer this objective, results for both descriptive and inferential analysis were reported. Descriptively, we revealed that of the 318 participants, the majority were; 210 (66%) males, 161 (51%) having bachelor degree education level, and 124 (39%) aged between 31 -40 years.

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Variable	Frequency	Percent
Age Group		
50 +	32	10.1
41 - 50	99	31.1
31 - 40	124	39
20 - 30	63	19.8
Gender		
Male	210	66
Female	108	34
Level of education		
Diploma	59	18.6
Bachelor's	161	50.6
Master's	77	24.2
Post-graduate diploma	21	6.6
Region of residence		
Dar es Salaam	121	38
Dodoma	41	12.9
Tanga	25	7.9
Arusha	42	13.2
Mbeya	33	10.4
Mwanza	56	17.6

**Table 2:** Description of participants' demographic characteristics

# 3.2 Testing Assumptions for SEM

The model assumptions underlying SEM were evaluated prior to drawing any conclusions about the relationship between the variables. The results of the study demonstrated the validity of the SEM assumptions, which included linearity via scatter plots, multicollinearity via VIF and tolerance levels, homoscedasticity via plots of the regression standardized residuals versus the regression standardized predicted residuals, and residual normality via normal probability plots. In addition to these presumptions, the skewness and kurtosis falling within the advised range of  $\pm 2$  and  $\pm 3$ , respectively, as mentioned by Cangur & Ercan (2015), demonstrated the multivariate normalcy.

# 3.3 Validity and reliability testing

The study constructs' validity and reliability were evaluated. Because the Cronbach's Alpha (CA) values exceeded the suggested threshold of 0.7 as specified by Palos-Sanchez & Saura (2018) and Vaske et al. (2017), the study demonstrated the reliability of all study constructs. This was also consistent with the average variance extracted, which is required for evaluating validity, and the composite reliability. Based on validity, the study demonstrated that the measurement models suggested by Fornell & Larker (1981) as well as the correlation between constructs and the Average Variance Extracted (AVE) values of above 0.5 demonstrated the attainment of convergent, discriminant, and construct validity.

Additionally, the model fit indices in the recommended measurement models for each construct were found to underlie within the designated cut-off points, indicating the attainment of construct validity. Because the internal reliability's composite reliability (CR) was higher than the suggested cut-off points of 0.6 (Lam, 2012), the researcher felt confident in the internal reliability.

Construct	No. items	Cronbach's Alpha	AVE
FS	6	0.914	0.415
FP	6	0.902	0.586
FC	6	0.863	0.467
FM	6	0.915	0.502
GG	6	0.870	0.548

Table 3: Assessment of Reliability and Validity of Study Constructs

#### 3.3.1 Factor correlation analysis

The bivariate correlation coefficient was calculated to evaluate the degree of relationship between the study constructs and provide support for the discriminant validity. The results showed a moderate Pearson correlation of 0.68 for FS and FM and 0.63 for FM and FC.

Factor	FS	FP	FC	FM	GG	
FS	1					
FP	.646**	1				
FC	.654**	.376**	1			
FM	$.678^{**}$	$.408^{**}$	.626**	1		
GG	$.498^{**}$	.154**	.461**	.589**	1	

**Table 4:** Bivariate Pearson correlation between constructs

*Key:* \*\* correlation was statistically significant at p<0.001

#### 3.4 Model Formulation and Validation

#### **3.4.1 Exploratory Factor Analysis**

Evaluation of the number and set of items forming a particular construct was performed using exploratory factor analysis. The exploratory factor analysis (EFA) was conducted in order to assess the total number of constructs, the perceived items that formed the particular construct and the extent of correlations between study items. The study was revealed to attain the sampling adequacy as the Keiser-Meiyer-Olkin Measure (KMO) was 0.9 being above 0.7 and still the Bartlett's Test of Sphericity was statistically significant at p < 0.001.

Table 5: KWO and Dartiett S Test results							
Kaiser-Meyer-Olkin Measure of Sampling Adequacy .940							
Bartlett's Test of Sphericity	Approx. Chi-Square	6760.876					
	df	435					
	Sig.	.000					

# Table 5. VMO and Pantlett's Test negults

After realizing that the study items were correlated enough and sampling was adequate, then the Principal Component Analysis (PCA) was undertaken to as to determine the number of components formed using the study observable items. Using 30 observable items, it was revealed that 5 constructs with Eigenvalues above 1 were formed as expected. The first principal component had Eigenvalue of 12.2 while the fifth component had Eigenvalue of 1.1. The cumulative percentage of rotation sum of squared loadings was 68.5.

-										
one					Extraction Sums of Squared			Rotation Sums of Squared		
ы р	11	ntial Eigen	values		Loading	gs		Loadin	gs	
uo r		% of	Cumulative		% of	Cumulative		% of	Cumulative	
0	Total	Variance	%	Total	Variance	%	Total	Variance	%	
1	12.238	40.793	40.793	12.238	40.793	40.793	4.548	15.161	15.161	
2	3.696	12.320	53.113	3.696	12.320	53.113	4.353	14.509	29.670	
3	1.905	6.350	59.462	1.905	6.350	59.462	4.017	13.390	43.060	
4	1.591	5.304	64.767	1.591	5.304	64.767	3.913	13.043	56.103	
5	1.130	3.766	68.533	1.130	3.766	68.533	3.729	12.430	68.533	

#### Table 6: Description on the extracted

Extraction Method: Principal Component Analysis

After determining the number of principal components, the rotation matrix was used to determine if the perceived observable variables form the particular construct. As expected, each of the observed variables was found within the perceived construct, no overlapping of items was observed. Additionally, the factor loadings per observable variable underlined with the requirement of being at least 0.5 for structural equation modelling (Hair et al., 2014; Yong & Pearce, 2013) as shown in Appendix 1.

# 3.4.2 Assessment of Common Method Bias

The Common Method Bias (CMB) also known as Common Method Variance (CMV) is the situation whereby the variability in responses is actually due to the instrument rather than the predilections between the respondents. The absence of CMB is justified when the Harman's single factor test which loads all items as one common factor has the total variance for a single factor as less than 50%. Our findings revealed to have KMO value of 0.940 and Bartlett's test of sphericity 6760.87 being statistically significant at p<0.001. Additionally, the single factor was formulated with a total Eigenvalue of 12.24 and a 40.79% of

variance due to extraction sum of squared under hence confirming the absence of CMB.

Component	Initial Eigenvalues			Extraction	Sums of Squa	red Loadings
-	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	12.238	40.793	40.793	12.238	40.793	40.793
2	3.696	12.320	53.113			
3	1.905	6.350	59.462			
			••••			
••••						
29	.175	.582	99.469			
30	.159	.531	100.000			

**Table7:** Total Variance Explained using the Harman's single factor test

Extraction Method: Principal Component Analysis

#### 3.4.3 Non-response bias analysis

Four basic study constructs (FP, FC, FS and FM) were used to assess the nonresponse bias. The first 50 observations and the last 50 observations were selected thereby comparing their means differences using the paired sample t-test for each study construct. The rule of thumb is that, in case there is no statistically significant difference at 5% level, the non-response bias is absent. The study revealed a non-statistically significant difference for the three constructs (FP, FS and FC) at 5% level. However, a statistically significant difference was observed for the FM construct. In general, most constructs had a non-statistically significant difference, and the observed difference for one construct was quite small hence cannot affect the interpretation and conclusion of the study results. We are hereby confirming that the non-response bias is not the problem for this study sample.

		Paired Differences							
			95% Confidence						
				Std.	Interval	of the			
			Std.	Error	Differ	rence			Sig. (2-
		Mean	Deviation	Mean	Lower	Upper	t	df	tailed)
Pair 1	FP	.127	1.131	.160	195	.448	.792	49	.432
Pair 2	FS	.290	1.378	.195	102	.682	1.488	49	.143
Pair 3	FC	.137	1.061	.150	165	.438	.910	49	.367
Pair 4	FM	.587	1.215	.172	.241	.932	3.415	49	.005

Table 8: Paired Samples Test results for non-response bias analysis

#### **3.4.4 Confirmatory Factor Analysis**

Confirmatory Factor Analysis (CFA), which comes after EFA, was carried out to evaluate the study hypotheses. The measurement and structural models were built as part of the CFA. The models were approved using the following fit indices, with their cut-off points being CMIN/DF (X2/df)  $\leq$  3, RMR  $\leq$  0.08, GFI  $\geq$  0.90, CFI  $\geq$  0.90, NFI  $\geq$  0.90, TLI  $\geq$  0.90, RFI  $\geq$  0.90, PCFI  $\geq$  0.50, and RMSEA  $\leq$  0.08. We found that every study construct obtained the necessary model fit indices as required by Figures 1 through 5. This was based on the measurement models. For example, it was found that the FS, as assessed by six observable items, had CFI, TLI, and RFI above 0.9 and a RAMSEA below 0.08.

#### 3.4.5 Measurement models for study constructs



Chi-square=16.399 (8 df) p = .037 model fit indices: CFI=.990 RMR=.017 TLI=.981 RFI=.963 PCFI=.528 RMSEA=.058 NFI=.980



Chi-square=5.351 (8 df) p = .719 model fit indices: CFI=1.000 RMR=.009 TLI=1.004 RFI=.992 PCFI=.533 RMSEA=.000 NFI=.996



Chi-square=10.826 (7 df) p = .146 model fit indices: CFI=.997 RMR=.014 TLI=.994 RFI=.982 PCFI=.465 RMSEA=.042 NFI=.992



Chi-square=3.262 (8 df) p = .917 model fit indices: CFI=1.000 RMR=.008 TLI=1.008 RFI=.994 PCFI=.533 RMSEA=.000 NFI=.997



Additionally, the overall measurement model as presented in Figure 6 was also revealed to conform with the stipulated model fit indices and hence implying that the data fitted well the specified model.

#### 3.4.6 Evaluation of Structural Model

Additionally, an evaluation of the structural model that was required to determine the connection between the study constructs was conducted. As the model fit indices were reached, the structural model's results agreed with those of the overall measurement models. Likewise, the RAMSEA was less than 0.08, but the CFI, TLI, and RFI were all above 0.9.

Structural Equation Model



# 3.4.7 Hypothesis Testing

After realizing that the SEM assumptions were met, then the regression estimated as obtained from the structural model were compared. We revealed that, controlling for FM and FP, each unit increase in FC the FS increases by 0.60. The observed increase was statistically significant at p<0.001. Based on these results, we had enough evidence of rejecting the null hypothesis thereby concluding that financial control (FC) had a positive and statistically significant effect on financial sustainability (FS).

Paths		Unstandardized Estimate	Standardized estimate	S.E.	C.R.	Р
FS. <	FM.	.312	.312	.055	5.689	***
FS. <	FP.	.537	.415	.064	8.402	***
<i>FS</i> . <	FC.	.604	.354	.109	5.562	***

Table 9: Effect of FC on FS controlling for FP and FM

Note: \*\*\* means statistically significant at p<0.001

# 3.4.8 Moderation analysis

The moderation analysis was carried out to determine whether the impact of FC on FS varied depending on the levels of good governance. Three primary groups were identified for the moderating variable (good governance): non-compliance, moderate, and compliance. When the average GG score was less than three, it was considered non-compliance; when it was three or more, it was considered moderate compliance; and when it was three or more, it was considered compliance. After classifying the data, the study showed that 193 (60.7%) compliance groups with GG made up the majority, followed by 17 (5.3%) moderate compliance groups and 108 (34%) non-compliance groups. Kline (2011) states that for a group to be eligible for multigroup analysis, it must contain a minimum of 100 cases. Two group moderation analyses were therefore taken into consideration after the moderate group, which had 17 (5.3%) of the cases, was discarded for additional examination as indicated in Table 10.

	Frequency	Per cent
Non-compliance	108	34.0
moderate	17	5.3
Compliance	193	60.7
Total	318	100.0

.Table 10: Descriptive Analysis of the GG

# 3.4.9 Measurement Invariance Testing

Measurement invariance was conducted to ascertain whether measures of the same underlying construct are being used in two distinct groups before conducting additional research on two group moderation analysis. The main objective of the measurement invariance test, according to Hair et al. (2010), is to verify that measured models run under different conditions yield a comparable representation of the same construct. In accordance with Xu et al. (2017), both the configural metric and scalar invariance were used to determine whether the measurement of a latent construct varied across groups.

#### 3.4.10 Testing for Configural Invariance

When testing for the configural invariance, we fitted the freely unconstrained model for both the compliance and non-compliance groups of GG for both FS and FC constructs.



I fit indices: CFI=.981 RMR=.051 TLI=.981 RFI=.9 PCFI=.949 RMSEA=.047 NFI=.954

Chi-square=33.171 (28 df) p = .229 model fit indices: CFI=.995 RMR=.049 TLI=.995 RFI=.970 PCFI=.929 RMSEA=.025 NFI=.972

As expected, the Chi-square test for configural models in case of FS and FP as presented in Tables 10 and 11 respectively were revealed to be invariant as evidenced by the non-statistically significant p-values.

Table 11. Composite Cin-square Test for the comigural model								
Model	NPAR	CMIN	DF	Р	CMIN/DF			
Unconstrained	106	437.692	400	.094	1.094			
Measurement weights	88	476.814	418	.024	1.141			
Structural weights	85	478.223	421	.028	1.136			
Structural covariances	82	489.637	424	.015	1.155			
Structural residuals	81	491.313	425	.014	1.156			
Measurement residuals	59	524.285	447	.007	1.173			
Independence model	44	4524.157	462	.000	9.793			

Table 11: Composite Chi-square Test for the configural model



#### 3.4.11 Chi –square Difference Tests

Furthermore, the Chi-square difference for moderation test was undertaken to evaluate the presence of non-invariance between groups. The rule of thumb is that the Chi-square test statistic should be statistically significant so as to conclude the presence of non-invariance between the restricted and the unrestricted models. The study revealed a strongly statistically significant Chi-square value at a 5% level (p = 0.003) hence implying the presence of non-invariance between the two models.

Model	DF	CMIN	P	NFI	IFI	RFI	TLI
Widder	Dr		I	Delta-1	Delta-2	rho-1	rho2
Measurement weights	18	39.122	.003	.009	.009	.005	.005
Structural weights	21	40.531	.006	.009	.010	.004	.005
Structural covariances	24	51.945	.001	.011	.013	.006	.007
Structural residuals	25	53.621	.001	.012	.013	.006	.007
Measurement residuals	47	86.593	.000	.019	.021	.008	.009

**Table 12: Chi-square difference Tests** 

Furthermore, the invariant test was evaluated using the Chi-square differences between the unconstrained and constrained models. The study revealed the Chisquare difference of 58.27 which was statistically significant at p <0.001 as shown in Table 13

	Chi-square	df	p-value	Invariant?
Overall model				
Unconstrained	478.223	421		
Fully constrained	536.495	446		
Number of groups		2		
Difference	58.272	23	< 0.001	No
Constrained path				
FS < FC	675.589	513	0.000	
Chi-square critical values				
90% confidence	553.41	513	0.1	
95% confidence	565.74	513	0.05	
99% confidence	589.37	513	0.01	

#### Table 13: Stats Tool Package for Chi-square Outputs

#### 3.5 Path by path Moderation Analysis

The presence of non-invariance further suggests that the effect of independent variables on the dependent variable might be different hence necessitating for further moderation analysis called path by path analysis. The path analysis was conducted by constraining the FS <--- FC path and we revealed that the Computed Chi-squared values were larger (675.589) as compared to the critical values (589.37) at 99% level, then the presence of statistically significant moderation effect of GG on the relationship between FC and FS.

#### 3.6 **Moderation Hypothesis Testing**

The last step was to assess the GG group with higher effect of FC on FS. We revealed that, in the group of not complying with governance, each unit increase in FC the FS increased by 0.362. The observed increase was statistically significant at p<0.001

Cable 14: Effect	ct of FC on FS acros	s the groups o	of GG			
Variables	Unstandardized Estimate	Standardized estimates	S.E.	C.R.	Р	Label
For the group n	ot complying with GG					
FS. < F	°C .362	.301	.119	3.049	.002	b3_1
For the group c	omplying with GG					
FS. < F	°C .414	.288	.098	4.209	***	b3_2

Tabla 14.	Effort o	f FC or	n FC	oonooo	tha	mound	of	CC
1 able 14:	Effect o	гсо	пгэ	across	une ş	groups	01	ԾԾ

Furthermore, based on the group complying with GG, we revealed that for each unit increase in FC, FS increased by 0.414. The observed increase was statistically significant at p < 0.001 (p = 0.000) as indicated in Table 14. In such instances, we had enough statistical evidence of rejecting the null hypothesis hence concluding that the GG significantly moderates the association between FC and FS.

#### **3.7** Discussion of Findings

The results maintained H3 of the study, in which FC was assumed to have positive and statistically significant effect on FS as proved by the effect of 0.60 (p < 0.001) of FC on FS.

This result is consistent with previous studies such as Dagane & Kihara (2021) that assessed the effect of financial controls on the financial sustainability of NGOs and the results show positive and significant relationship. The study by Kenyan researchers Ochola, et al. (2022) looked at the effect of financial controls on financial sustainability of the public sector which revealed a positive and significant relationship. On the other hand, Ahmed & Ng'anga, (2019) conducted research in Kenya to examine the effect of financial controls on financial sustainability; the results demonstrated a positive and significant relationship. The effect of financial controls on the financial sustainability of the North Gorontalo Regency Government was examined in the study carried out in Indonesia by Aneta et al. (2021) which revealed a positive and significant relationship between financial control and financial sustainability. Bashaija, et al. (2020) conducted a study to examine the effects of MFI financial control in Rwanda and the study's findings show a positive and significant relationship.

However other previous studies show contradictory findings such as Abiodun (2020) from Nigeria conducted a study on the enterprises listed in the capital market to assess the effect of financial controls on financial sustainability whosefindings show a negative and substantial association. Kumari et al. (2019) did another study from Sri Lanka to investigate the effect of financial controls on the financial sustainability which revealed insignificant but favorable correlation between financial control and financial sustainability. These contradictory findings could be caused either by the studies being conducted in a different country with diversity in social, political, and economic factors as well as sectorial differences. The study found that for the group that complies with good governance, the FS increased by 0.414 for every unit score increase in FC. A statistically significant increase was observed at p < 0.001 (p = 0.000). In a similar vein, Table 4.11 unstandardized estimates revealed a positive correlation between FC and FS. Afterwards, the research showed that among those who

voted in favor of the non-compliance with GG, the FS increased by 0.36 for every unit increase in FC. This association was statistically significant at the 1% level (p=0.002). The results indicated that there is a common way in which all groups maintain financial control. This demonstrates that the influence of financial control on financial sustainability is not significantly different between the groups that comply with good governance and those that do not.

# **3.8** Theoretical implication of the study

Theoretical contribution is further demonstrated by the confirmation that the relationship between financial control and financial sustainability was moderated by good governance. Thus, to the best of the author's knowledge, no moderator variable testing Agency Theory factors has employed good governance. Consequently, by demonstrating that good governance strengthens the relationship between financial sustainability and financial control, the findings filled a theoretical gap in the literature.

#### 3.9 Conclusions and Recommendations

The paper analyzed the effect of FC on FS of selected LGAs in Tanzania with the moderation role of GG. The findings revealed that FC has positive and significant effect on FS. Thus, it is concluded that FC is predictor of FS of selected LGAs in Tanzania. The results of this study revealed that Good Governance moderated partially the relationship between financial control and financial sustainability because all the relationships turned to be positive and significant under both groups. Paradoxically, the results supported the propositions because they showed a stronger relationship in the non-compliant group compared to the compliant group.

The study's conclusions led to the formulation of the following recommendations. After learning that financial control is a prerequisite for the financial sustainability of the selected LGAs, LGAs should give priority to the components of financial control by ensuring that their organizations have financial control procedures and protocols in place such as segregation of duties, authorization limit, and custodianship of physical and financial resources.

# 3.10 Study Limitations and Area for Future Research

The purpose of this study was to examine the effects of financial control on the financial sustainability of the selected LGAs, specifically all major cities in Tanzania, without considering LGAs in rural areas. As a result, the study's findings are only applicable to LGAs operating in Tanzania's major cities, and the researcher recommends that more research be done on the relationship between financial accountability and financial sustainability for LGAs in

Tanzania's rural areas. Also, the study used only financial control as internal determinants of financial sustainability of LGAs in Tanzania using Good Governance as a moderating variable. The study suggests that future studies should investigate additional variables so as to improve the prediction power of the model.

In addition, despite the study's generalization, the researcher found that good governance had a significant moderating effect on the relationships between financial control and the financial sustainability of local government units (LGAs) in Tanzania. The study suggests that more research be done using different methodologies and applying good governance in different contexts to see if similar conclusions can be drawn.

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