Budgetary Approval and Financial Sustainability in Local Government: Analysis of Gender Moderation

Abstract

Budget approval, linked to the forward planning and control tool is a very advantageous stage in ensuring organizational financial sustainability. However, organizations continue to apply traditional budgeting best practices that lack a clear integration of sustainability factors. Hence, this research aims to identify the key factors of budget approval in an organizational setting, like local governments in Uganda and to assess their potential impact on financial sustainability using Structural Equation Model (SEM). The analysis reveals that the male gender has a significant moderating effect on the relation between BA and FS. Again, it was found that there is a significant positive relationship between Financial Sustainability (FS) and Budgetary Approval (BA) Finally, the research provides a conceptual model to fully understand the structural relationship of BA, Gender and Financial sustainability.

1. Introduction and background literature

Local government (LG) financial sustainability has received a great deal of practice and research attention as a result of the current dynamics in the monetary federalism environment, which are maintained by the rising demand for accountability and transparency (Onyango-Delewa & Nkote, 2019; Shih & Elkobi, 2024). In order to make it easier to comprehend how local entities should implement resource-allocation procedures that improve fiscal discipline, a number of public finance studies have been conducted over the years (Ibrahim, Aneta, Wolok & Aneta, 2024).

According to Rumyk & Ivanov (2024), Biondi (2025), and Jain (2024), financial sustainability is the capacity of an organization to keep its revenue, expenditure, and borrowing arrangements at levels that are both financially sustainable and consistent with its short- and long-term goals. It is sometimes maintained that under financial federalism, local governments ought to control their own fiscal policies in order to manage their local economies. In addition to enhancing regional stability, the technique considerably lowers horizontal budgetary imbalances. However, under sound financial sustainability procedures, implementing independent monetary policy is essentially feasible (Jain, 2024).

In the majority of local government jurisdictions, achieving traditional norms of financial sustainability is still mainly a pipe dream. Financial sustainability setbacks in both established and emerging economies are often attributed to changes made to budgetary practices, according to a number of studies (Ullah, Ullah & Zaman, 2024; Bekun, Gyamfi, Köksal & Taha, 2024; Athari, 2024). However, in order to successfully adapt monetary operations to financial sustainability requirements, prompt actions are needed to alter budgetary laws, statutes, and regulations (Pest, 2024; Kapesa, 2024).

Additionally, Ullah et al. (2024) and Bekun et al. (2024) note that achieving financial sustainability requires a local agency's geographical setting. Jain (2024) adds that an agency's potential to achieve financial sustainability may be hampered by its distance from the central resource allocation unit. This phenomenon is unique to local entities in different Sub-Saharan African economies that are resource-endowed differently and under stress (Suhartono, Sartono, Hadi & Fahmi, 2025).

The aforementioned opinions and the generally equivocal findings of the majority of empirical research suggest that a thorough comprehension of the financial sustainability and budgetary approval procedures—gender perspectives in connection to LG's triangulation—is essential. This is especially true if the ongoing issue of LG's financial sustainability in light of other complicating variables is to be successfully resolved. The current study surveys the financial sustainability of Kabale District Local Government in Uganda, East Africa, including its component (budgetary approval) and moderating element (gender). Uganda has been praised for its financial federalism expertise since the early 1990s, when the nation adopted decentralization as a political, administrative, and fiscal resource-allocation policy (Onyango-Delewa & Nkote, 2019).

2. Theoretical foundations

The study is founded on two basic theoretical foundations. On one hand, it invokes priority theory of sustainable finance proposed by Wison (2010). According to the theory, the priority accorded to the sustainable finance agenda in a nation or area is accurately reflected in the rate at which economic agents strive to meet sustainable finance goals in that nation or region (Ozili, 2022). According to the theory, changes in budgetary approvals are influenced by a number of financial sustainability characteristics, including accountability and service delivery.

However, the formative fiscal federalism theory (Onyango-Delewa & Nkote, 2019; Kuehn, 2025) was also used to describe the relationship between entity location and budgetary approval modifications and how it impacts financial sustainability.

In essence, the new study adds two significant pieces to the body of information on financial sustainability in local government. First, a thorough conceptual model that explains how budgetary approvals affect financial sustainability was contributed to the literature on financial sustainability (Tusquellas, López-Villanueva, Palau & Santiago, 2025; Teshera-Levye, Alam, Corwin & Dauer, 2025).

Although other research has emphasized the importance of examining this link (Duncan, Ross & Mikesell, 2025; Akpanowo & Mbobo, 2025), there is a dearth of knowledge regarding this relationship in a modeling framework in the presence of gender as a moderating factor. Over time, the oversight has ruined a thorough understanding of financial sustainability, particularly in Africa (Akpanowo & Mbobo, 2025). Additionally, this study improves the conceptual understandability of LG financial sustainability by drawing on the theoretical positions of financial federalism and financial misapprehension (Ozili, 2025).
Second, putting up a straightforward and uncomplicated model offers a fairly balanced view of the issue, as prior research on LG financial sustainability has been mainly equivocal and even presented contradictory findings. To thoroughly test the financial sustainability paradoxical mechanisms and gender as a third factor affecting its relationship with budgetary approval, statistical techniques are used, including regression analysis (Tyagi, Rane & Manry, 2022; Arkes, 2023) and structural equation modeling-based path analysis (Sobaih & Elshaer, 2022; Sari, Sutyarso, Bakri & Tugiyono, 2024).

Both conceptually and empirically, the proposed and investigated procedures are probably going to close a significant gap in the literature on financial sustainability. Furthermore, revealing gender as a moderating component in budgetary approval modifications offers a more complex relational understanding and possible explanation of the financial sustainability construct. The study hypotheses formulate in the next section come after the model shown in Figure 1.

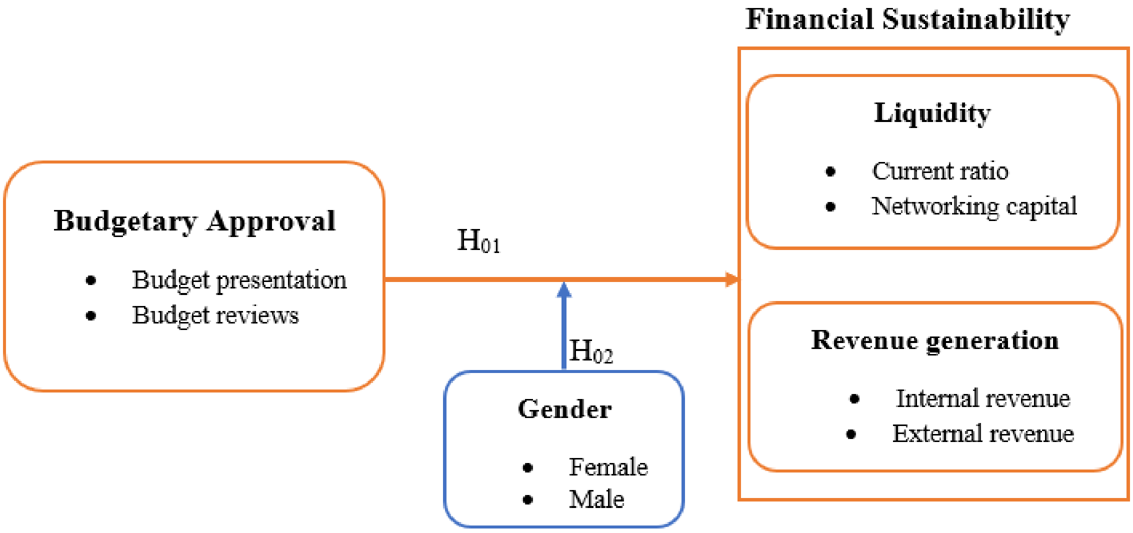

Figure 1.1: Conceptual model

3. Hypothesis Development

3.1 Financial Sustainability and Budget approval

Financial sustainability in local government is determined by how the organization handles its debt, deficits, spending, and gross revenue over a specific time period. In technical terms, these four budget aggregates which are frequently regarded as limitations, are the primary indicators of its financial performance (Ozili & Iorember, 2024; Oanh & Dinh, 2024). Therefore, when one set of budgetary constraints is combined with another set of constraints, financial sustainability is abundant. For example, if borrowing is increased and spending is restrained, for example, in the face of limited revenue, the Local Government can achieve some deficit objective and enjoy financial sustainability (Ozili & Iorember, 2024; Oanh & Dinh, 2024).

Most communities do, however, achieve these limitations in circumstances where excessive spending frequently results in significant budget deficits as well as increased debt and tax obligations. Donnat (2024) coexist with developing country institutions that have limited resources and bear the responsibilities of deficits, debt, and taxes. Cohabitation is deemed good since it forces legislators to address taxation, the effectiveness of spending programs, and the need for institutional adjustments to the budget (Donnat, 2024; Ozili, 2025).

In order to make successful and efficient decisions, managers use budgets to plan, control, and coordinate the organization's resources and activities (Vasylevska, Pozdieieva, Ivashchenko, Shapoval & Kurtsev, 2024). The budget is an essential document for assessing managerial performance and a potent tool for managerial control (Setyowati & Prabowo 2024). For the purpose of controlling and managing the relationship between government revenues and expenditures, the budget is a crucial economic policy instrument. The government budget supports fiscal policies, bolsters political influence, and promotes economic expansion and advancements. It offers order to an uncertain environment and represents plans for the future. It is one of the most important documents for preserving financial accountability and transparency, which holds executives responsible for any financial operations or transactions. According to Masu-Gombe & Alkali (2024), the word "budget" comes from the French word "bouggette," which means "little bag." Its objective is to translate goals and plans into quantifiable, intelligible financial values for management decision-making and execution. According to Zwall & Stephen, (2024), a budget is the process of distributing funds to meet various human needs while taking politics into account. Therefore, to properly understand the complete process, two of the components of the financial sustainability process as indicated in Figure 1.1—liquidity and revenue generation—need to be carefully analyzed using the proper statistical techniques. Given the discussion above, hypothesis one is developed;

H_{01}: *Budget approval does not have a statistically significant effect on financial sustainability*.

3.2 Gender: Moderating Consideration

Gender as moderation in research on financial sustainability was studies by Ozili (2024). Galletta, Mazzù, Naciti & Vermiglio (2022) examined the relationship between sustainability and financial performance by using gender as a moderating variable. The findings of (Galletta et al.,2024) indicate that gender has a moderation effect on financial performance, however, the effect was not significant for the female gender. Sebai, Talbi, and Guerchi-Mehri (2025) conducted an international study with participants from 26 developing economies and discovered that women viewed long-term financial comfort as more relevant and gratifying across 10 different quality characteristics.

However, a substantial amount of research has demonstrated that men are more flexible and comprehensive than women in the realm of financial outsourcing, which may make them more reliable in guaranteeing the financial stability of an organization (Lulaj, 2024). Since the reviewed literature has not examined the relationship between gender-influenced budget approval and financial sustainability, it needs to be examined and modelled.

Filling in this contextual gap will greatly improve our understanding of how gender affects the relationship between budgetary approval and financial sustainability in the local governments in Uganda. Gender as a moderating factor for research carried out in Indonesia on a sample of 274 senior students to ascertain their perspectives on gender roles in financial stability of their homes, the findings of the study indicated that financial education of male students as a moderation to financial stability was highly significant (Kurnianto & Soewarno, 2024). Based on the results of the stated studies, the following hypothesis has been proposed.

H_{02}: *Gender does not have a statistically significant moderating effect on the relationship between budgetary approval and financial sustainability.*

3 Research Methodology

3.1 Participants and Procedure

This study employed individual analysis units. The research area and population is the local government staff of Kabale District -Uganda. The number of sampled respondents using both purposive and stratified random sampling techniques was 360, Table 1.1. The data collection period was three months, May-July 2024. Online and offline data collection methods were employed. The online method using the Google form is distributed via the link while the offline questionnaire is distributed directly to respondents. The gender composition of the participants and other demographics were; (Male, n = 231 (64.17%); Female, n = 129 (35.83)) who were selected using the approaches of both purposive and stratified random sampling as earlier stated. The participants included: Heads of Departments 100 (27.7%), Finance Officers 50 (13.9%), Administrative Staff 50 (13.9%), Councillors 50 (13.9%), Local Council threes (LC III) 14 (3.9%), Chief Accounting Officer 1 (0.3%), Mayor 1 (0.3), and District Chairperson 1 (0.3%). The participants were divided into the following age groups: 18–30, 43 (11.9%); 31–40, 112 (31.1%); 41–50, 113 (31.4%); and over 50, 92 (25.6%), Table . Before data collection began, the survey's goals, confidentiality, potential dangers, benefits, and volunteers were explained to all potential participants. In order to confirm their voluntary involvement in the study, participants were required to sign a consent form. This investigation was conducted in accordance with the ethical standards set by the Kabale University Research and Ethics Committee.

Table 1.1: Sampling procedures

Category	Population	Sample size	Sampling Techniques
District chairperson (LC 5)	1	1	Census sampling
Chief Accounting Officer (CAO)	1	1	Census sampling
Mayor	1	1	Census sampling
L.C III	14	14	Census sampling
Sub-County Chiefs	14	14	Census sampling
Heads of department	100	100	Census sampling
Finance Officers	150	50	Purposive sampling
Administrative Staff	250	45	Purposive sampling
Councillors	250	45	Purposive sampling
NGOs	80	19	Purposive sampling
Citizens	2739	70	Stratified Random sampling
Total	**3600**	**360**	

3.1.1 Reliability of the Measurement Scale

As previously stated, a questionnaire was used to collect the study data. The purpose of the data collection exercise was to confirm the theoretical relationship between the constructs as shown in Figure 1. In actuality, the measuring scale's validity and reliability are crucial. Despite their close relationship, validity and reliability refer to separate aspects of the measurement device (Ahmed & Ishtiaq, 2021). In general, a measuring device may be valid and reliable at the same time, but if a measuring device is valid, it is also probably reliable. However, validity cannot be guaranteed by reliability alone (Barnett, Jerebine, Keegan, Watson-Mackie, Arundell, Ridgers & Dudley, 2023).

According to Haryanti, Pandugaran & Aljaberi (2023), dependability requires consistency in the questionnaire's measuring results. Scale dependability was evaluated through the use of inter-total correlations and internal consistency. This was done in order to guarantee that the measuring scales consistently and accurately looked at the constructs' meanings.

Cronbach alpha, the most widely used and recognized scale reliability indicator, was used to evaluate the measures' internal consistency dependability. There is no set cut-off point for the alpha coefficient in the published literature (Hussey, Alsalti, Bosco, Elson & Arslan, 2023). Although 0.60 is acceptable, 0.70 is the generally acknowledged lower limit for Cronbach alpha (Diebig & Angerer, 2021). Variables with an extremely low Cronbach alpha are varied and not representative of the construct. The preliminary reliability analysis of the measurement scales is shown in Table 1.2. JASP 0.19.3.0 was used to compute item-total correlations and Cronbach alpha coefficients.

Table 1.2: Single factor CFA Model Assessment

Construct	**Cronbach alpha**	**Construct reliability (CR)**	**Average Variance Extracted (AVE)**
Budgetary approval (**BA**)	0.872	0.802	0.680
Financial sustainability (**FS**)	0.869	0.761	0.626

3.1.2 Discriminant Validity

Assessing discriminant validity aims to confirm that a reflective construct has more robust associations with its own indicators than with any other construct in the PLS path model (Hair, Hult, Ringle and Sarstedt, 2022). When scores from assessments of distinct constructs do not converge, discriminant validity is assumed. Therefore, it tells us whether scores from a measure of a construct are distinct from those from other constructions (Ringle, Sarstedt, Sinkovics and Sinkovics, 2023).

In this study, a novel approach by Henseler, Ringle and Sarstedt 2015), the heterotrait-monotrait ratio of correlations (HTMT) criteria wase used to assess discriminant validity, Table 1.3. According to the HTMT criterion, the correlation value between the variables is between 0.85 and 0.9. It is presumed that discrimination across constructs has taken place for values below 1.00.

Table 1.3: HTMT Criterion

Construct	**BA**	**FS**
BA	-	
FS	0.763	-

4 Results and Discussion

4.1 Descriptive and Preliminary Statistics

Demographics of study participants

The total number of respondents was 360 and the target population comprised of local government stuff and citizens of Kabale District in Uganda. The majority of respondents were male 231 (64.2%). The larget group of respondents were aged 41-50, 113(31.4%). 110 (30.6%) of the participants had a diploma as their highest academic qualification and only 8 (2.2%) held a postgraduate certificate at the time of the survey. Of the sampled participants, 148 (41.1%) had worked between 6-10 years at the district, Table 1.4.

Table 1.4: Demographics of respondents

Variable	Category	Frequency and Percent
Gender	Male	231(64.2)
	Female	129(35.8)
Age	18-30	43(11.9)
	31-40	112(31.1)
	41-50	113(31.4)
	Over 50	92(25.6)
Qualification	Certificate and Below	149(41.4)
	Diploma	110(30.6)
	Degree	93(25.8)
	Post Graduate Degree	8(2.2)
Time worked with the district	2-5	97(26.9)
	6-10	148(41.1)
	11-20 and over	115(31.9)
Position held at District	District chairperson(LC 5)	1(0.3)
	Chief Accounting Officer(CAO)	1(0.3)
	Mayor	1(0.3)
	L.Cs III	14(3.9)
	Sub-County Chiefs	14(3.9)
	Heads of department	100(27.7)
	Finance Officers	50(13.9)
	Administrative Staff	50(13.9)
	Councilors	50(13.9)
	Citizens	79(21.9)

4.2 Hypothesis testing

In particular, the focus will be on assessing the statistical significance of direct effects and indirect effects. Fig. 1 showed the conceived model of the research, whose constructs have been analyzed for any structural relationships, under section 2, "Theoretical Foundations of the Study." Two main hypotheses were formulated: one proposed a relationship between budget approval and financial sustainability, while the other posited that gender could operate as a moderating variable between the relationship between FS and BA. The former could provide the direct effect of BA on FS while the latter could give the indirect effect which is essential the moderating effect of gender.

Direct effect

The proposed relationship between two constructs is known as a direct effect, and it most likely represents the scenario in which hypothesis testing in a causal relationship is most frequently performed (Pearl, 2022). To examine the structural relation between BA and FA, hypotheses one, was derived:

H_{01}: *Budget approval does not have a statistically significant effect on financial sustainability*.

Table 1.5: Total effect for budgetary approval on financial sustainability

					95% Confidence interval	
	Std. estimate	Std. Error	z-value	p	Lower	Upper
BA → FS	0.320	0.042	7.627	< .001	0.237	0.402

The results in Table 1.5 demonstrated a positive and significant path coefficient from budgetary approval (BA) to financial sustainability (FS) (β = 0.320, t-value = 7.627, p < 0.001). Thus, there is not enough evidence to support the null hypothesis (**H_{01}**) and it is As such rejected at 5% significance level.

Moderation effect

According to Baron and Kenny (1986, p. 1174), the primary goal of moderation analysis is to "measure and test the differential effect of the independent variable on the dependent variable as a function of the moderator." To address the primary objective of this study, the effect of gender on the relationship between budgetary approval and financial was examined, Table 1.6. Hypothesis two was developed to this effect.

H_{02}: *Gender does not have a statistically significant moderating effect on the relationship between budgetary approval and financial sustainability.*

Table 1.6: Gender moderating effects between BA and FS

Model		Unstandardized	Standard Error	Standardized	t	p	95% CI Lower	95% CI Upper
M_0	(Intercept)	4.059	0.042		97.302	< .001	3.977	4.141
M_1	(Intercept)	1.539	0.243		6.338	< .001	1.061	2.016
	Gender_dummy	0.094	0.302	0.057	0.310	0.757	-0.500	0.688
	BA	0.635	0.060	0.689	10.542	< .001	0.517	0.754
	GenBA	-0.015	0.075	-0.039	-0.204	0.839	-0.163	0.132

There is no statistically significant interaction effect, as shown in Table 1.6, model M_1, suggesting that gender does not moderate the impact of budgetary approval on financial sustainability. As observed from Table 1.6, the effect is -0.015 lower for males ($gender_i = 1$) than for females, whose effect is calculated to be 0.635. At the 95% confidence interval, H_{02} is therefore rejected.

5 Discussion and conclusions

The results of hypothesis one indicated that the budgetary approval had a direct effect on financial sustainability in local governments as evidenced by a statistically significant regression coefficient (β = 0.320, t-value = 7.627, p < 0.001). In effect, this result is quite important and adds to the existing body of knowledge by rejecting the null hypothesis that; **H_{01}:** *Budget approval does not have a statistically significant effect on financial sustainability*. However, the key contribution of the research is to the moderating effect of gender on the relationship between BA ad BF. The moderating effect of gender was examined through hypothesis two which stated that; **H_{02}:** *Gender does not have a statistically significant moderating effect on the relationship between budgetary approval and financial sustainability*. The gender dummy was derived two levels, female and male. It was ascertained that the moderating effect for the female gender was not statistically significant at the 5% significance level. However, there was a moderating effect for the male gender (β = 0.635, t-value = 10.542, $p < 0.001$).

This research is an important contributor to financial sustainability literature in regard to participatory budgeting as BA is a measure of the context of participatory budgeting. Budgetary approval is an important aspect in the management of public resources in general and those of local government in particular. The moderation effect of gender as often been ignored as there exists limited literature (Provasi & Harasheh, 2021; Galletta et al., 2022).

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Competing interests

The authors declare that they have no financial or personal relationship(s) that may have inappropriately influenced them in writing this article.

Authors' contributions

The first author was a PhD candidate who was supervised by author 2 and 3.

Ethical considerations

Ethical approval was granted by the Kabale University Research Ethics Committee (KABREC).

Data availability

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

Disclaimer

The views and opinions expressed in this article are those of the authors and do not necessarily reflect the official policy or position of any affiliated agency of the authors.

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