Determinants of Revenue Collection Performance in Tanzanian Local Governments

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Abstract

Tanzania introduced Decentralization by Devolution reforms (D by D) in 1998 whereas one of its objectives is to enhance fiscal autonomy to Local Government Authorities (LGAs). Despite such effort, the level of financial dependence is still very high. This paper examines the determinants of LGAs' own revenue collection performance as a vital aspect towards reducing the dependence rate. It estimates regression model using panel data of 133 councils aggregated into 25 regions, from 2008/09 which is 10 years after reform introduction to 2018/19. The results indicate that financial dependence ratio, regional share of GDP and own source revenue per capita have negative impact on own source revenue collection performance; they provide unattractive signs towards overall fiscal position of the nation. In contrast, the paper finds that budgeted grant per capita and government grant disbursement ratio have positive impact on own revenue collection performance. The paper recommends the government to re-visit reform execution to eliminate soft budget constraints and other inefficiencies in LGAs' revenue mobilisation, hence reducing fiscal burden to the central government.

Keywords: Local government authorities, revenue collection performance, intergovernmental grant in Tanzania

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Introduction

Tanzania embarked into decentralization by devolution (D by D) in 1998 with the aim of enhancing local government authorities' (LGAs) fiscal capacity towards service delivery and to bring equity. As part of the reforms, the country made local tax reforms in 2003 aiming to enhance LGAs' ability to generate their own source revenue and introduced an intergovernmental grant allocation system in 2004, which became operational in 2006/07, aiming to equalize fiscal disparities in LGAs' spending needs (The Prime Minister's Office, Regional Administration and Local Government, 2007; Venugopal & Yilmaz, 2010). The two systems, local taxation and intergovernmental grants, are an integral part of LGA's financial sustainability and define their ability to deliver entrusted functions. This underscores the needs for the two systems to operate effectively. When the intergovernmental grant system is not properly operationalized, LGAs become in danger fiscally, because of the resulting deficiencies in the level of financial support to LGAs. Similarly, when LGAs are not efficient in generating revenues from their own sources, they cannot be financially sustainable. As Lhutfi and Suguharti (2022) emphasize, the financial sustainability of LGAs is a function of financial resources and extent of responsibilities which defines the level of services.

Despite the D by D initiatives towards enhancing LGAs' fiscal ability, their contribution in terms of own source revenues is still not convincing. As in many developing countries, LGAs in Tanzania have minimal contribution of own revenue in financing their budgets, leaving a significant part being financed by intergovernmental transfers. The Collector and Auditor General [CAG] (2020) report, for instance, shows the contribution of LGAs' own source revenues for four years, from 2015/16 to 2018/19, which declined from 28 percent to 11 percent. Similarly, the same CAG report observed more than 70 percent out of 185 LGAs being inefficient in achieving own revenue collection targets over the four years period. On the other hand, the flow of the intergovernmental grant, which is the main financing source of LGAs' budgets, is also uncertain. All these contribute into persistence of the budget deficit in Tanzanian LGAs. Consequently, citizens bear the impact because LGAs are forced to cut-off some of their budgeted expenditures for service provision, as immediate solution.

Tanzania being a developing country with a notable external source of finance in its overall budget, there is a need for strengthening internal efforts towards revenue collection from all internal sources, whether under LGAs or under Tanzania Revenue Authority to reduce dependence. The Nation Bureau of Statistics [NBS] tax statistics report (2022) shows average contribution of external finance in the country's revenue budget from 2010 to 2021 is more than 20 percent. This also, underscores the need for LGAs to be efficient in their revenue collection to relieve the government

from reliance on external sources. Empirical evidence from Habbe (2017) shows LGAs' revenue autonomy and effectiveness in collecting own source revenues can improve public welfare in terms of reducing the poverty rate and improving the human development index.

Considering the importance of LGAs to enhance their financial independence position, the study explores the determinants of own source revenue collection performance. This is vital, because it will help to identify factors that contribute into making LGAs to exert more or less effort in collecting their own revenues. Whenever LGAs are reluctant to exert sufficient effort to collect revenues from their own sources, their performance will be low and its impact will be not only to the citizens who will experience shortage of services but also to the country's fiscal condition because the central government bears the financial burden of LGAs (Piancastelli & Thirlwall, 2021). The wellbeing of the citizens, who are also the tax payers, depends with the extent financial sustainability (Sinervo, 2020).

Despite the importance of identifying determinants of revenue collection performance, there is paucity of studies in this area. It is not just in Tanzania but for developing countries in general, whereas limited data availability on revenue collection performance across LGAs within a country contributes to this scarcity. Notable studies in this area (Bahl, 1971; Tait et al., 1979; Sen-Gupta, 2007; Le et al., 2012; Piancastelli, 2015) concentrated on examining determinants of tax efforts in a multi country comparative context, with very few (Vallés-Giménez & Zárate-Marco, 2017; Piancastelli & Thirlwall, 2021; Yaru, 2020) that have examined in a sub-national perspective within a country. This study examines the determinants of LGAs' revenue collection performance in Tanzania, with reference to its reform initiatives. Specifically, the paper seeks to identify whether factors related to operationalization of intergovernmental grant and resource endowment exposure have influence on LGAs' revenue collection performance.

Review of Literature on Own Source Revenue Performance

The concept of own source revenue collection performance in sub-national government is connected with the concept of tax effort which is famous in multi-country studies. However, there are also some studies including Hy et al. (1993) and Vallés-Giménez and Zárate-Marco (2017) which have used the concept of tax-effort in examining the performance of sub-national governments. Since the seminal work of Lotz and Mors (1967) which introduced tax effort, the concept has been widely used as a proxy measure of resource mobilization performance to governments. Such performance is measured in terms of resources that can be collected by the government when it

uses fully its regulatory power within jurisdiction or as maximum resources that can be derived by a government within its jurisdiction considering the economic, social, institutional and demographic characteristics (Vallés-Giménez, & Zárate-Marco, 2017). The concept is useful in assessing the degree to which the tax capacity of a given jurisdiction is effectively harnessed (Boukbech, Bousselhami, & Ezzahid, 2019).

This study adopts a customized meaning of tax effort in the institutional theory context, whereas the performance of LGAs is considered to be a reflection of institutional arrangements and economic factors. The meaning of tax effort is tailored to own source revenues instead of tax revenues. The main reason for such customization is that own source revenues, particularly for Tanzanian LGAs, include both tax and non-tax revenues derived from any source within jurisdiction. Moreover, the customization helps to avoid complexities of establishing the tax capacity because own source revenue targets are directly identifiable through LGAs budgetary processes. In contrast, there are several approaches of establishing tax effort and there are many variables that could be used to measure it (Vallés-Giménez & Zárate-Marco, 2017). Tax effort can be measured by indicators that reflect real present or past collections or macroeconomic variables such as GDP. Thus, the focus of the study is to assess the own source revenue collection performance which is the reflection of the tax effort concepts in terms of present collections. It determines factors that contribute into variations on the extent to which LGAs mobilize own source revenues against their own targets reflected in their revenue budgets.

In the extant literature there are three broad categories of factors which are considered to impact on revenue collection performance (Karran, 1985; Castañeda-Rodríguez, 2018; Yaru, 2020; Sridhar & Ravi, 2022). The first category is the institutional arrangement which defines the fiscal interrelationship between the central government and LGAs, particularly in relation to intergovernmental grants. The second is the economic factors which reflect the extent of resource endowment within the council. The third category is the political factors such as corruption and political stability, but their influence is indirect through the institutional arrangement or economic factors by affecting resource allocations. These categories are more discussed in the following subsections.

Public Finance Theory and Institutional Arrangements

Central governments worldwide provide financial support to their LGAs through intergovernmental grants, coherent with the public finance theory. The public finance theory, developed by Musgrave in 1959, categorises the functions of the government budget into three main

groups, which are resources allocation, income distribution and macroeconomic stabilisation. This categorisation has been the basis for fiscal decentralisation reforms around the globe, as propounded by Wallace Oates in 1972. Governments have been striving to achieve optimal structure in terms of assigning responsibilities and resources to subnational governments while simultaneously maintaining economic stability. Consequently, on the one hand subnational governments have been assigned with responsibilities which reflect local needs and fiscal power to collect revenues from designated sources. On the other hand, intergovernmental grants have been employed as a means of not only providing support to subnational governments, but also as a macroeconomic stabilisation tool.

Considering the propositions of the of the public finance theory, it is neither feasible nor desirable for LGAs to collect all revenue to finance their budgets for three main reasons (Musgrave, 1971; Oates, 2005; Martinez-Vazquez, 2008; Bird, 2011). Firstly, the fiscal capacity differs across LGAs and spatial requirements for social goods and services also differ. These create the need for grants to smoothen variation in the spending needs. Secondly, services offered by one LGA are not confined to only members of such council, because geographical boundaries do not restrict for members from one jurisdiction to access benefits offered by another LGA. In connection to this, the central government grant is needed to support expenditures with spill over benefits because there is no clear cut-off point between revenue collection and user benefits. Thirdly, central governments are in a superior position to collect more revenue from many sources efficiently and at lower cost than LGAs. Thus, intergovernmental grant serves as macro-economic stabilization tool for distributing collected revenues to different priority areas.

Beside intergovernmental grant to offer direct financial support to LGAs, empirical evidence suggests it can bring two contrasting impacts on own source revenue collection. On one hand, it can embrace positive impact on aggregate revenue terms, because its spending enhances local tax base (Masaki, 2018). On the other hand, heavy reliance on intergovernmental grant can bring fiscal indiscipline in LGAs' spending behaviour and soft budget constraint (Oates, 1999). Consequently, the assured flow of fund from central government may result into not only slackness to LGA officials in collecting revenue from own sources, but also extravagant spending (Rodden, 2002; Arachi & Zanardi, 2004). The problem is aggravated by the missing link between the source of fund which is the grant from central government and service beneficiaries who are the residents of an LGA. Service recipients may not bother to penalize overspending officials because the use of grants makes them feel that their expenditures are financed by non-residents. Empirical finding suggests intergovernmental grants

accelerate LGAs' expenditures much higher than do similar increase in own source revenues (Rodden, 2002).

Considering Tanzanian context, there are two aspects of institutional arrangement which can affect own source revenue collection performance in its LGAs. The first is the design of the intergovernmental grant system and the second is its operationalization. The design of intergovernmental grant system provides assurance for LGAs to finance their budgets through heavy dependence on grants, hence may induce slackness in revenue collection. In the absence of moderating mechanism, heavy dependence and poor coordination of intergovernmental fiscal relations embrace poor fiscal positions of LGAs and the nation as a whole (Martinez-Vazquez, 2008). LGAs will keep on experiencing budget deficit due to shortage in own source revenues while the central government will keep on carrying the burden of financing LGAs through grant, hence keep on using external financing sources. For the case of operationalization of the intergovernmental grant system, LGAs experience uncertainties in the flow of the allocated amount. The empirical evidence from Alam and Alam (2020) study suggests the impact of uncertainties in funds availability is to interrupt the budgetary execution process. This should be enough to make LGAs officials cautious and enhance their efforts in the collection of own revenues. Thus, assuming the rational behaviour of LGAs officials, the uncertain flow of central government grants is expected to have a positive impact on own revenue collection.

In the fiscal relationships, heavy dependence on central government grants is also not preferred because it requires LGAs to have limited fiscal autonomy. However, there is no conclusion on the extent to which LGAs should be fiscally independent, but fiscal autonomy is widely considered as indicator of revenue autonomy (Stegarescu, 2005; Kim 2020). Limited fiscal autonomy makes LGAs to remain spending units with little influence on expenditure decisions because disbursed grants, whether for development or recurrent expenditures, are always attached with description. In contrast, a higher level of fiscal autonomy gives LGAs more negotiating power with other entities and gives them power to offer unique services (Kim, 2020). Revenue autonomy, to a certain degree, is very essential because it makes LGAs responsive to local needs by adjusting the size of their budgets (Brueckner, 2000; Mikesell, 2007; Neyapti, 2010). It allows LGAs to have budget flexibility because they can raise either tax rates or involve new revenue sources to finance any increase in service demand. Thus, it is important for LGAs to collect own revenues to their full potential to reduce the burden on their central governments.

As Dewata, Jauhari, Aprianti, and Hijria (2018) suggests, higher dependency on intergovernmental grants tends to affect the financial performance of LGAs negatively. Considering the heavy reliance of Tanzanian LGAs in intergovernmental grants to finance their budgets, the study hypothesizes that central government grants to have a negative impact on own source revenue performance. Thus, two hypotheses are developed as follows; whereas the first reflects the amount of grants and the other captures the flow of grants:

H1: Higher dependence on central government grants have negative effect own source revenue collection performance.

H2: Higher disbursement ratio of central government grant negatively affect own source revenue collection performance.

Economic Factors' Influence

A number of economic variables are noted to by different authors to have influence on revenue performance. The physical boundaries in which the LGAs occupy determine the economic base including natural resources and economic activities from which LGAs can exercise their fiscal power to collect revenue. It determines resource endowment LGAs are exposed with for own source revenue collection. As Piancastelli and Thirlwall (2021) postulates, revenue collection performance in government settings is a function of tax base and structural features such as per capita income and share of GDP which reflect the level of economic activities. These reflect the taxable capacity of LGAs. Similarly, Karran (1985) and Yaru (2020) highlights per capita income, population growth, economic activities, and macro-economic variables as economic factors that can influence own source revenue collection performance. Others are demographic variables such as population density and the extent of urbanization (Castañeda-Rodríguez, 2018).

Despite the existence of multiple economic factors which can influence revenue collection performance not all of them can be applied in the local government context, because subnational governments usually have limited scope in terms the economic activities. Literature synthesis of Castañeda-Rodríguez (2018) and Vallés-Giménez and Zárate-Marco (2017), for instance, provide numerous economic indicators commonly utilized in examining resource mobilization performance. Such indicators include GDP as a proxy measure of economic development, GDP per capita, financial intermediation which is considered to stimulate economic growth and the tax base in general, international trade as reflected by the sum of imports and exports in comparison to GDP, share of agriculture to GDP, inflation level and natural resources endowment. However, it is difficult to find disintegrated data that capture the extent of international trade or inflation level for every LGA, particularly in developing countries. Only share of GDP of LGAs, GDP per capita within LGAs, share of

agriculture to GDP, natural resources endowment and demographic variables can be applied in sub-national level studies, subject to data availability. Similarly, Aswar (2019) recognize the importance of own revenues in the financial performance of LGAs because it explains the extent of resources available in the council. The premise is that the more the LGAs are exposed to these economic variables, the more the likelihood of achieving their revenue collection targets.

In the context of this study, the question behind economic variables is which ones are capable of explaining the variations in own revenue collection performance among LGAs in Tanzania. As Piancastelli and Thirlwall (2021) identifies, revenue capacity is different from the actual success in realization of the revenue. An LGA can be well economically endowed, but if its officials do not exert sufficient effort in collecting revenues it may not attain its revenue targets. Thus, economic base is important aspect but it does not provide guarantee that an LGA will always perform well in collecting its own revenues. However, it is vital for LGAs with high per capital income to also have high revenue collection performance in order to reduce their dependence. When a country allocates revenue sources to LGAs, it is essential to enable richest LGAs to finance at least their expenditures (Bird, 2011, Bird & Vaillancourt, 2008). Thus, two hypotheses are developed in relation to the influence of economic factors on own revenue collection performance, as follows:

H3: Higher GDP share positively influence own source revenue collection performance.

H4: Higher resource exposure per person, measured by GDP per capita and own source per capita, positively affect own source revenue collection performance.

Data and Model Estimation

The panel data for the regression were extracted from two main sources; CAG reports for LGAs where the budgetary performance data were extracted and the NBS database where demographic and regional economic performance data were extracted. The data cover information from financial year 2008/2009 to 2018/19 for 133 LGAs which were existing in that period. However, due to the limitation of availability of economic data to LGAs level, it was necessary to aggregate the financial performance data into 25 regions to match regional level economic data which are available. It should be noted that, in the intergovernmental fiscal structure of Tanzanian LGAs comprises district councils, town councils, municipal councils, and city councils together with their subsequent lower levels but not regional secretariats. Thus, the aggregation of the data into regions was only for analysis purposes.

As Vallés-Giménez and Zárate-Marco (2017) highlighted, there are several approaches for measuring tax effort and revenue performance in general, but the context of the study dictates which one to use. Revenue collection performance can be established ether in absolute figures as examined in Vallés-Giménez and Zárate-Marco (2017) and Yaru (2020) or in percentage terms as in Piancastelli and Thirlwall (2021). The dependent variable of this study considers own source revenue collection as a percentage of budgeted collections. This captures the performance of LGAs in terms of realising their revenue collection targets set by themselves in the budgeting process. It explores the major concern of various stakeholders including the CAG regarding the level of effort LGAs do exert in mobilising own revenues which are already pegged in their expenditure budgets.

From a set of budgetary performance data, we constructed three independent variables related to institutional arrangements. These are grant disbursement ratio as a proxy measure of grant disbursement performance, budgeted grant per capita and grant proportionate on the total revenues as a proxy measure of the extent of financial dependence (Doamekpor, 2007). On the other hand, the demographic and economic performance data was used to construct three variables which are regional share of GDP, GDP per capita, and budgeted own source revenue per capita. Detailed definitions and formulas of the variables are provided in Table 1.

Table 1. Operationalisation of the Variables.

Abbreviation	Formula	Measure	Reference
OSperf	Actual own source revenues / Budgeted own source revenue	Own Sources Revenues collection performance	Habbe (2017)
Attgrnttottlrev	Actual total Central Government Grant/ Total Revenues	Level of financial dependence	Dewata et al. (2018)
SharesofGDP	Regional contribution of GDP in the country	Regional productivity – broadness of tax base	Piancastelli and Thirlwall 2021
Bugrntpercapita	Budgeted Total Central Government Transfers/ Number of People	Assured Support from central government per Person	Oppong
GDPpercapita	Regional GDP/Number of People	The richness of the tax base i.e. local tax payers	Piancastelli (2015)
BugOSpercapita	Budgeted own source revenues/ Number of people in council	Ability to Raise Revenue per Person	Aswar (2019) Piancastelli and Thirlwall (2021)
Attgrandisbratio	Actual Central Government Grant/ Budgeted Central Government Grant	Flow on central Government Grant	Alam and Alam (2020)

The estimation model, which recognises own source collection performance as the dependent variable, is presented as follows:

$$(\text{OSPerf})_{it} = \beta 1_i + \beta 2(\text{ActualGranttoRev})_{it} + \beta 3(\text{GDPShare})_{it} + \beta 4(\text{L}\textit{BudGrantperCap})_{it} + \beta 5(\text{L}\textit{GDPperCap})_{it} + \beta 6(\text{L}\textit{OSperCap})_{it} + \beta 7(\textit{Attgrandisbratio})_{it} + e_{it} \quad \textit{Model (1)}$$

Where: (*OSperf)it* - is the dependent variable which is the own source performance in terms of ratio, observed for individual region *i* in the time *t.*

Subscript it stands for regions *i (= 1, 2, 3...., 21)* and at time *t (2009, 2010....2019).*

$\beta 1 \ldots \beta 7$ are scalar parameters

e_{it} – is the error term

Results and Discussion

The analysis of the data involved preliminary analysis which covered descriptive analysis and pairwise collection and panel model estimation. The results of descriptive analysis and pairwise correlation for the variables used in the estimation model are presented in Table 2 and Table 3 respectively while the results of the regression model are presented in Table 4.

Descriptive Analysis Results

The results of the descriptive analysis in Table 2 indicate that own source revenue collection performance of the LGAs (OSperf), which is the dependent variable, averaged 86.7 percent while the ratio of central government grant to total LGA's revenue (attgrnttottlrev) has an average of 90.8 percent. These results suggest dominance of the central government grant in financing LGAs budgets by 90.8 percent despite LGAs to collect about 86.7 percent of their own revenue targets. Despite this dominance, the average disbursement rate of the central government grant (attgrandisbratio) was 78.6 percent, which means the support given to LGAs was less by 21.4 percent compared to promised amount through budgetary allocations. The disbursement rate is also slightly lower than the own source revenue collection performance. The descriptive results for regional share of GDP to the country indicate that it ranged between 1.2 percent and 17.5 percent with a mean of 4.4 percent. Such variation in regional contribution to the GDP indicates that some regions have relatively lower resource base for collecting own revenues is relatively weak.

Table 2. Descriptive Analysis – Without Log Transformation of Variables.

Variable	Obs	Mean	Std. Dev.	Min	Max
OSperf	247	0.8670445	0.153394	0.4	1.64
Attgrnttottlrev	247	0.9080162	0.064887	0.45	0.98
Shareofgdp	247	4.445668	3.200015	1.28	17.45
Bugrntpercapita	247	92697.15	43469.44	8515.34	228828
GDPpercapita	247	1770299	804098.1	499715	4522689
BugOSpercapita	247	8185.843	5937.831	276.0761	35014.76
Attgrandisbratio	247	0.7961538	0.197676	0.19	1.11

The amount of government grants per capita allocated to LGAs ranged between TZS 8,515.34 and TZS 228,828.00 with a mean value of TZS 92,697.15 while the budgeted amount of own source revenue per capita ranged between TZS 276.08 and TZS 35,014.76 with a mean of TZS

8,185.84. These results show a huge difference between allocated grant per capita and budgeted own source revenue per capita. The regional GPD per capita also shows a wide variation in LGAs' resource endowment; it ranges from TZS 499,715 and TZS 4,522,689 with a mean of TZS 1,770,299.

The results of descriptive analysis, in Table 2, also show that the structure of three variables differs from other variables in terms of absolute values. Such variables are budgeted grant per capita (Bugrntpercapita), regional GDP per capita (GDPpercapita) and budgeted own source revenue per capita (BugOSpercapita); their mean values are in thousands while the remaining variables have mean values which are within single digits. Thus, log-transformation was conducted to scale down those variables with relatively larger absolute values. As Metcalf and Casey (2016) proposed, log-transformation of data with relatively large-scales helps to avoid masking variables which have lower scales in data visualisation and analysis.

Correlation Results

The results of the pairwise correlation show that own source revenue collection performance has a very weak association with the independent variables. The strongest correlate of own source revenue collection performance with the independent variables in the estimation model has a coefficient of 0.193, which the ratio of total grant to total revenue (ttgrnttottlrev). The coefficient is negative, suggesting that the own source revenue collection performance moves in a different direction with the dependence rate; the higher the dependence rate, the lower the own source revenue collection performance.

Table 3. Correlation Matrix of Variables in Estimation Model.

	OSperf	Attgrnt tottlrev	Share Ofgdp	logbugrnt percapita	loggdp percapita	logosper capita	Attgran disbratio
OSperf	1						
attgrnttottlrev	-0.1929	1					
shareofgdp	-0.0128	-0.6191	1				
logbugrntpercapita	0.0664	0.027	-0.1387	1			
loggdppercapita	-0.0546	-0.3003	0.3183	0.5846	1		
logospercapita	-0.0152	-0.4047	0.2571	0.7723	0.7851	1	
attgrandisbratio	-0.0532	0.4785	-0.0442	-0.0077	0.1748	0.1004	1

The correlation coefficients of own source revenue collection performance with other independent variables are 0.0664 with the budgeted grant per capita (logbugrntpercapita), 0.0546 with the GDP per capita (loggdppercapita), 0.0532 with grant disbursement ratio (attgrandisbratio), 0.0152 with own source revenue per capita (logospercapita) and 0.0128 with regional share of GDP (shareofgdp), which is the lowest. All these coefficients are negative, except with the budgeted grant per capita.

Panel Estimation Results and Discussion

The estimation of the regression results considered panel data models because of the nature of the data being in panel form. Then, the Hausman test was used to identify the most appropriate model between the fixed effects model and the random effects model for discussion. The result of the test is significant (Prob>chi2= 0.000), suggesting the fixed effects model is preferred over the random effect model. The panel regression results of the estimated model, for both fixed effects and random effects estimation, are reported in Table 4 along with the result of the Hausman test. As stated in the review of Literature on own source revenue performance, the dependent variable in the model is the own source revenue collection performance in terms of ratio; actual revenue collected over budgeted collection.

The individual effect of the explanatory variables from the fixed effects estimation results shows five significant variables in the model. Four variables are significant at 1 percent and one variable is significant at 5 percent. Explanatory variables which are significant at 1 percent in the fixed effect model are the actual total grant to total revenue (dependence) ratio, central government grant disbursement ratio, log of budgeted grant per capita and log of own revenue per capita. Meanwhile, the explanatory variable which is significant at 5 percent is the share of GDP per capita. On the other hand, the log of GDP per capita is insignificant in the model.

Table 4. Own Source Revenue Collection Performance Estimation Results.

Variables	Fixed Effect Estimation			Random Effect Estimation		
	Coefficient	T	P>t	Coefficient	z	P>z
attgrnttottlrev	-3.18311***	-9.19	0.000	-3.462167***	-11.30	0.000
shareofgdp	-0.04086**	-1.94	0.054	-.0114215***	-3.26	0.001
logbugrntpercapita	0.844448***	9.06	0.000	.8298545***	9.91	0.000
loggdppercapita	-0.11115	-1.05	0.293	-.0764391	-1.16	0.246
logospercapita	-0.72594***	-8.64	0.000	-.6618137***	-9.32	0.000
attgrandisbratio	0.583515***	7.7	0.000	.643241***	9.03	0.000
Constant	2.767296***	4.93	0.000	2.455959***	6.66	0.000
	Number of Obs. = 247 Number of groups = 25			Number of Obs. = 247 Number of groups = 25		
Hausman test chi2(6) = 32.41 Prob>chi2=0.0000	R-sq: within = 0.3894 between = 0.0456 overall = 0.1358 F (6,216) = 22.96 Prob > F = 0.0000			R-sq: within = 0.3620 between = 0.4556 overall = 0.3645 Wald chi2(6) = 137.68 Prob > chi2 = 0.0000		

** and *** Significant at 5% and 1% levels, respectively.

From the fixed effect model, there are three variables which are significant and have negative coefficients. The first is the total grant to total revenue; indicating that when the dependence ratio increases, own source revenue collection performance decreases by almost 3.2 times. The result is consistent with Dewata et al. (2018) who observed higher dependence on intergovernmental grant tend to have negative impact on financial performance of LGAs. This result suggests existence of institutional arrangement complacence whereas an increase in LGAs' dependence ratio seems to discourage own source revenue collection performance. It reflects soft budget practices in LGAs' revenue mobilisation. LGAs with higher dependence ratio seem to relax in collecting their own revenues because of assurance in financial support. This is dangerous for macroeconomic stability, because the central government will keep on carrying a burden of financing highly dependent LGAs.

The second variable which has negative coefficient is the regional share of GDP, which indicates that as it increases by 1 percent the average own source revenue collection performance declines by almost 4 percent. The variable belongs to economic factors, whereas the regression

results suggests that LGAs located in regions with higher share of GDP in the country have relatively lower own source revenue collection performance. This is contrary with the hypothesis derived from prior studies; whereas higher regional GDP share was expected to have positive effect on own revenue collection performance. Instead, LGAs located in regions with higher GDP share do not exert sufficient efforts to achieve their revenue collection performance targets. This can be due to LGAs' inefficiencies or being too optimistic in setting revenue targets which are difficult to realise.

The third significant variable with negative coefficient is the log of own source revenue per capita; it also belongs to economic category. The result for this variable indicates that when own source revenue per capita increases by 10 percent, the own source revenue collection performance declines by 8.4 percent. This outcome is contrary with the developed hypothesis; it suggests LGAs with relatively higher own source per capita tends to exert relatively lower collection effort. Despite those LGAs to have relatively higher own revenue per person, still they could not achieve their revenue targets. This is inconsistent with Aswar (2019) who observed LGAs' own source revenue tends to have positive influence on their financial performance. The government should devise measures which encourage LGAs with higher revenue per capita to achieve their collection targets.

The estimated model has two significant explanatory variables with positive coefficients. The first is the budgeted grant per capita, which belongs to institutional variables. The results indicate that as budgeted grant per capita increases, the own source revenue collection performance in terms of exerted effort also increases. This outcome suggests that LGAs promised to get relatively higher grant per person (through budget figures), tends to exert relatively higher collection efforts. The result is contrary with the stated hypothesis. Instead, this suggests that government's efforts to recognise own source revenue collection performance as part of minimum conditions for grant allocation was effective. Annually, LGAs in the country were assessed against pre-set criteria, including the level of efforts in own revenue collection, before allocation of intergovernmental grants. LGAs were, therefore, motivated to achieve revenue collection targets to maintain their grant allocation status. Moreover, the results in this paper are contrary to Oppong who observed intergovernmental grants to have no impact on local revenue collection in Ghanaian LGAs.

The second significant variable with positive coefficient is the actual total disbursement ratio which captures institutional features. The results suggest that when the actual grant disbursement ratio increases, the own source revenue collection performance rate also tends to increase. It is an encouraging outcome because revenue disbursement promotes own source revenue collection performance. The result is inconsistent with the hypothesis derived which is associated with

behavioural laxity in revenue mobilisation; an increase in grant disbursement ratio was expected to have negative influence LGAs' own source revenue collection performance.

Conclusion and Recommendation

The results of the paper show that revenue collection performance of LGAs is influenced by institutional factors and economic factors surrounding LGAs, congruent with the institutional theory, but in varied ways. An increase in financial dependence, regional share of GDP and own source revenue per capita are observed to have negative impact on own source revenue collection performance, contrary to reform objectives. LGAs operate with soft budget constraint in own source revenue collection, because intergovernmental transfer offer assurance of financing their budgets. On the other hand, the paper finds that log of budgeted grant per capita and government grant disbursement ratio has positive impact on own revenue collection performance. This provides encouraging prospects that LGAs' revenue collection performance is attached with grant allocations and disbursement.

The results suggest existence of weaknesses in the execution of reforms, which consequently result into non-achievement of its aim of enhancing fiscal autonomy to LGAs. The government should institute measures to discourage soft budget practices and other inefficiencies in revenue mobilisation. Generally, the paper indicates that there is a need for the government to revisit the execution of reforms for successful attainment of its objectives. It provides a lesson to other developing countries which are struggling with heavy burden of financing their sub-national governments. Further research in this area may focus on evaluating whether the allocation of revenue sources to LGAs is optimal towards attaining revenue performance targets.

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