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Public Expenditure in the Fastest Growing and Emerging Market Economies in Africa: The Role of Institutional Quality

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ABSTRACT

Emerging and fastest-growing markets in Africa are developing their financial environment to attract investors and position themselves as an upcoming generation of strong and influential markets. The **subject** of this study is public expenditure outlays used to stimulate economic activity in emerging markets in Africa. The **purpose** of this study is to isolate the main determinants of government spending and the role of institutional quality. The **relevance** lies in the significance of maintaining such expenditures at optimal levels to benefit the economy. The **scientific novelty** lies in the analysis of the main factors explaining government spending to support policy formulation in emerging markets. This study applied the autoregressive distributed lag (ARDL) model to test both long-term and short-term dynamics. Based on the **results**, the study demonstrated both joint and long-run causality between the selected variables and government expenditure. Short-term causality is not confirmed. The study **concluded** that the Wagner law still holds, in which economic growth is coupled with an increase in expenditure. The Economic freedom index is more effective in controlling government expenditure than the POLITY 2 variable. This study offers some policy implications.

Keywords: public expenditure; emerging markets; institutional quality; Wagner law; autoregressive distributed lag; Africa

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ОРИГИНАЛЬНАЯ СТАТЬЯ

Государственные расходы в быстрорастущих странах Африки с развивающимся рынком: роль качества институциональной среды

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АННОТАЦИЯ

Развивающиеся и наиболее быстрорастущие рынки Африки совершенствуют свою финансовую среду в целях привлечения инвесторов и позиционирования себя в качестве сильных и влиятельных рынков нового поколения. **Предметом** данного исследования являются государственные расходы, используемые для стимулирования экономической активности на развивающихся рынках стран Африки. **Цель** данного исследования – выявить основные факторы, определяющие государственные расходы, и роль институционального качества. **Актуальность** заключается в важности поддержания таких расходов на оптимальном уровне, чтобы они приносили пользу экономике. **Научная новизна** – в анализе основных факторов, объясняющих государственные расходы для поддержки разработки политики на развивающихся рынках.

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В данном исследовании применялась модель авторегрессии с распределенным лагом (ARDL) для проверки как долгосрочной, так и краткосрочной динамики. Результаты исследования продемонстрировали как совместную, так и долгосрочную причинно-следственную связь между выбранными переменными и государственными расходами. Кратковременная причинно-следственная связь не подтверждена. В исследовании сделан вывод о том, что закон Вагнера, согласно которому экономический рост сопровождается увеличением расходов, по-прежнему действует. Индекс экономической свободы более эффективен для контроля государственных расходов, чем переменная POLITY 2. Данное исследование позволяет сделать некоторые выводы, применимые при разработке политических решений.

Ключевые слова: государственные расходы; развивающиеся рынки; институциональное качество; закон Вагнера; авторегрессия с распределенным лагом; Африка

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1. Introduction

This study examines the long-term determinants of government expenditure in emerging and fastest-growing economies, with particular focus on the role of institutional quality. Several countries in Africa are developing their financial markets to attract investors and position themselves as an upcoming generation of emerging markets. They offer investors opportunities for good returns on investments. The nature and sophistication of the stock market, in comparison to the level of economic development, underpin the classification of an economy as emerging [1, 2]. In this study, the term emerging markets refers to countries with financial markets that help to win investors' attention and are experiencing growth led by the private sector [3].¹ Fastest-growing economies in Africa are identified by the African Development bank.² In most emerging and fastest growing markets, the size of the government represents the extent to which public institutions are participating in economic development. The government brings about changes in the structure of the economy. In most economies, the government's size and scope have changed. It is desirable for any government to promote the welfare and interests of citizens. This is coupled with engaging programs in different domains, including economic, political, and legal structures. Involvement in such programs increases the size of the govern-

ment, particularly in Africa, where the private sector does not do much to improve economic outcomes³ [4].

While it may be plausible that government expenditures should increase to stimulate economic activity, it is also critical that such expenditures are mitigated to bring benefits to the economy. A rise in government spending that outstrips revenues may crowd out private investments. To deal with this, the government may follow an expansionary fiscal policy drive, which may cause the economy to overheat. However, stable government expenditure underpinned by taxation revenues that are proportional to gross domestic product (GDP) may give rise to a balanced budget [5].

Discussions on government expenditure and its drivers are key, as they provide direction to policymakers on making effective decisions in managing fiscal shortfalls and bringing stable economies [6]. It is critical to focus on government expenditure considering that in emerging and growing markets in Africa, there are still elements of poverty and other social ills like high unemployment and crime. Improvements in social indicators do not match the growth in government expenditure. More so, as much as studies have been done focusing on these drivers, there is no consensus on the main determinants in this context. While there is a consensus that factors such as economic growth, trade openness, inflation, population, taxation, and democracy are associated with government expenditure, there is a lack of agreement on their

¹ Africa Business Pages (ABP) (2023). The emerging markets in Africa. URL: <https://www.africa-business.com/features/africa-emerging-business.html> (accessed on 20.11.2023).

² Africa Development Bank (2023). Africa's economic growth to outpace global forecast in 2023–2024 — African Development Bank biannual report. URL: <https://www.afdb.org/en/news> (accessed 19.11.2023).

³ Farquharson, E., Yescombe, E. R. (2011). How to engage with the private sector in public-private partnerships in emerging markets. World Bank Publications.

respective contributions [7, 8]. Furthermore, there is a lack of evidence about the role of institutions in explaining government expenditure.

Institutions influence economic activity as they put in place and act as constraints that allow for interaction between political, social, and economic factors. They help streamline human behavior and ensure that there are benefits derived from human interactions and any economic activity. Countries develop faster where there are strong and effective institutions. Scholars have conducted extensive research on the impact of institutions on economic growth and activity [9, 10]. These studies argue that strong and efficient institutions explain country differences with respect to income levels. However, there is still limited work on their effect on government expenditure patterns. There is inconclusive evidence regarding their effect in different political regimes and the extent of economic freedoms provided [11, 12]. There is rent-seeking behavior in economies with autocratic rule as the government allocates more funding to military activities as opposed to other development areas such as education, which improves welfare for all. Effective institutions can help mitigate such behaviors, yet the evidence is not clear in our context.

From a policymaker's point of view, it is critical to understand ways to administer public funding when faced with limited resources and the need to reduce costs of governance. Balancing between money allocated to capital and recurrent expenditures requires that policymakers be informed of the main drivers, as it becomes difficult to develop where such choices are in conflict. Since the effects of these drivers differ based on the context and choice of variables, it is critical that we understand the dynamics in emerging and growing market economies. These have drawn much attention as potential drivers of regional GDP. The main questions are as follows: Which are the main drivers and constraints to a rise in government expenditure? Does institutional quality play an important role in explaining the level of government expenditure?

This paper is organized as follows: section 2 focuses on a literature review to provide evidence from past studies; it is followed by section 3, which focuses on the methodology;

section 4 gives the results and discussion; and, finally, the study provides conclusions and policy implications.

2. Literature review Theories

Several theoretical propositions have been put forward in relation to government or public expenditure. For example, Wagner's proposition opines that public expenditure is driven by a rise in economic growth. The rise in demand for public services and decisions by the state to increase their administrative capacity lead to an increase in expenditure. Growth would translate to increased public spending [13]. Keynesian theory argues that government intervention in the form of social programs and public-funded projects increases public expenditures. Investing in such programs creates a conducive environment for private sector participation in development [14].

Empirical evidence

It is critical that government expenditures be translated into sustainable economic development. Understanding how resources are distributed and managed helps to gauge potential economic outcomes. This helps in reviewing spending plans and redirecting government efforts towards beneficial areas. In the African context, public funding is the main engine for growth using public programs. It is no simple task to effectively manage public resources. Furthermore, countries differ in terms of governance and development; hence, their needs and priorities differ as well. Public expenditure efficiency increases with high levels of GDP per capita [15]. Evidence [16] supports that there is unidirectional causality from GDP to government expenditure. GDP has a positive effect on government expenditure [7]. On the contrary, [17] shows that there is no link between government expenditures and GDP, suggesting that Wagner's Law does not hold. There is no evidence of causality between the two variables.

An inflow of international aid results in an expansion in government recurrent expenditure [7, 18]. Past studies [19, 20] argue that international aid is fungible for financing recurrent expenditures. It is a key determinant of government expenditure in low- and middle-income economies [21]. It crowds out domestic government spending on public investment [22].

Evidence suggests that the effect of urbanization on expenditure depends on the type of outlay. For example, past studies [17, 23, 24] show that urbanization has a positive effect on health care expenditure. It induces health care expenditures in developing countries [25]. Urbanization leads to an increase in demand for public services [26]. On the contrary, [27] show that urbanization has a nonlinear relationship with government expenditure. It has a negative effect on public sector expenditure due to positive external consequences and economies of scale. The relationship becomes positive after crossing a threshold of 55.28% due to negative externalities.

Studies [7, 17, 28–31] show that taxation has a positive effect on government expenditure. The two variables are cointegrated and have a stable relationship. The long-term and positive impact of taxation exists when we consider capital government expenditure [32]. Causality runs from taxation revenue to government expenditure [33]. On the contrary, unidirectional causality flows from government expenditure to tax revenue [34]. The tax-spend hypothesis was found to exist using data for a group of countries in Latin America. It shows that the government spends first, increasing taxation at a later stage. This means that changes in public expenditure lead to changes in public revenue [35].

Good governance is critical for economic development. Budget allocations fund public programs, which drive growth in emerging and growing market economies. An economic system could be open or closed, and alternatively, a country could be regarded as democratic or autocratic, but the government still has a key role to play in development. Institutional quality has been found to influence the level of government expenditure in past studies. For example, [11] argues that the type of political regime determines what features within government expenditure; government expenditure is low in a country with an inefficient legal system [36]; the quality of institutions determines the efficiency of government expenditure [7, 37]; high-quality institutions facilitate and help to effectively manage public resources [38]; institutions are effective where they limit money wasted and corruption [39]. The effect of institutional quality on expenditures depends on the composition.

For example, corruption increases expenditure on defense and public services while reducing expenditure on education, health, and cultural issues [40]. This is supported by [41], which shows that weak institutions result in corrupt practices and high public expenditures.

There are few cross-country studies linking aid and government expenditures [42, 43]. Trade openness has been found to negatively affect government expenditure [17]. This is supported by the author of [18], who shows that trade liberalization has a negative association with the expenditure structure. On the contrary, past studies [44–46] found that trade openness has a positive effect on government expenditure in low-income countries. Trade tax revenue has a positive impact on expenditure in the long run, not the short run [18]. A study [47] argues that the quality of institutions reinforces the causal relationship between openness and government expenditure. [50] find no cointegration relationship between trade openness and government expenditure.

3. Methodology

3.1. Model and estimation

In this section, the study models public expenditure on a vector of variables identified from the literature based on their relevancy. The approach is to use an autoregressive distributed lag (ARDL) model, as supported by past studies [6, 19, 49]. The model was selected based on the assertion that there are a spillover effects from past behaviors of variables. The procedure entails the estimation of an overparameterized model with an arbitrary number of lags for all variables. This may give rise to a model that is consistent with the theory and data employed. An economic procedure was followed to determine the relevance of the model. This involves checking for stationarity or unit root and determining the order of integration. The study employed the methods described in [50] and [51]. Once the order of integration has been determined, the study proceeds to test for cointegration using methods by Westerlund and Kao [52]. After confirming the cointegration of variables, the subsequent step involves choosing the optimal model. A study [53] suggests that if all variables are stationary, then ordinary least squares techniques and vector autoregression

models are applied. If all variables are non-stationary, we apply the Johansen test to assess cointegration. Again, with mixed variables, we test for cointegration, and if present, we employ the ARDL model with possibilities of using error correction models (ECM) and assessing causality. Non-stationary variables are made stationary by taking the first difference. The same can be attained by including a time variable in the regression or by extracting trends and cycles from the single series using the Hodrick-Prescott filter. All these approaches to attaining stationarity may result in losing the long-run information of the variables. However, it's possible to derive an ECM from ARDL by linear transformation. The ECM integrates both short- and long-run dynamics and avoids losing long run information. The ARDL captures both short- and long-run relationships among cointegrated variables. As suggested by [54], the study applies the pooled mean group (PMG) method, which allows for short run coefficients to vary across countries while maintaining the same long run coefficients. It is applicable even with small periods and cross sections in panels. The specific model is as follows:

where α is a constant and β are parameters

$$\begin{aligned}
 GEP_{it} = & \alpha_i + \sum_{j=1}^p \beta_0 GEP_{i(t-j)} + \sum_{j=0}^q \beta_1 GDPPC_{i(t-j)} + \sum_{j=0}^q \beta_2 TO_{i(t-j)} + \\
 & + \sum_{j=1}^p \beta_3 POLITY2_{i(t-j)} + \sum_{j=0}^q \beta_4 EFI_{i(t-j)} + \sum_{j=0}^q \beta_5 ODA_{i(t-j)} + \\
 & + \sum_{j=1}^p \beta_6 UBN_{i(t-j)} + \sum_{j=1}^p \beta_7 TE_{i(t-j)} + \mu_{it} \tag{1}
 \end{aligned}$$

to be estimated; i and t represent country and time components. Through re-parameterization of equation (1) the error correction term (ECT) is obtained as follows:

$$\left(\begin{aligned}
 & GEP_{i(t-j)} - \omega_1 GDPPC_{i(t-j)} - \omega_2 TO_{i(t-j)} - \\
 & - \omega_3 POLITY2_{i(t-j)} - \omega_4 EFI_{i(t-j)} - \omega_5 ODA_{i(t-j)} \\
 \Delta GEP_{it} = & \alpha_i + \vartheta_i - \omega_6 UBN_{i(t-j)} - \omega_7 TE_{i(t-j)} + \sum_{j=1}^{p-1} \theta_1 \Delta GEP_{i(t-j)} + \sum_{j=0}^{q-1} \theta_2 \Delta GDPPC_{i(t-j)} + \\
 & + \sum_{j=0}^{q-1} \theta_3 \Delta TO_{i(t-j)} + \sum_{j=0}^{q-1} \theta_4 \Delta POLITY2_{i(t-j)} + \sum_{j=0}^{q-1} \theta_5 \Delta EFI_{i(t-j)} + \\
 & + \sum_{j=0}^{q-1} \theta_6 \Delta ODA_{i(t-j)} + \sum_{j=0}^{q-1} \theta_7 \Delta UBN_{i(t-j)} + \sum_{j=0}^{q-1} \theta_8 \Delta TE_{i(t-j)} + \mu_{it}
 \end{aligned} \right) \tag{2}$$

The short- and long-run coefficients, respectively, are θ and ω , and the speed of adjustment is ϑ .

3.2. Data and variables

The study uses annual data from various sources for the period 1990–2020. The analysis focuses on 19 emerging and fast-growing African economies. The dependent variable is government expenditure (GEP), obtained from the International Monetary Fund database. This is the real government expenditure as a share of GDP [19]. The main explanatory variables are tax effort (TE), which is defined as tax revenue as a share of GDP [55]. The data set on true random scores is obtained from the United Nations University World Institute for Development Economics Research. Net ODA received (% of GNI) is employed to capture net aid from official donors (ODA). Institutional quality is captured using the economic freedom index (EFI). Data is collected from the Fraser Institute and is an annual measure that captures efforts to create a stable macroeconomic environment and ensure that contracts are enforceable [56]. In addition, the POLITY 2 score captures a country's democratic institutions on a scale from one to ten. Control variables, as defined by the World Bank, are gross domestic product per capita (GDPPC) in current United States dollars (US\$) which is defined as the GDP divided by the mid-year population; trade openness (TO), which is the average imports and exports as a percentage of GDP; Population in the largest city (% of the urban population) is used as a proxy for urbanization (UBN).

4. Results and discussion

Table 1 provides summary statistics for variables as follows: the average government expendi-

Table 1
Descriptives

stats	GEP	GDPPC	TO	POLITY 2	EFI	ODA	UBN	TE
mean	20.40	2087.13	30.81	2.61	5.77	7.29	30.02	26.61
sd	7.07	2376.93	13.93	5.28	1.09	8.83	14.23	7.45
skewness	1.12	1.66	13.93	5.28	1.09	8.83	14.23	7.45
kurtosis	4.12	5.10	3.01	1.71	2.58	25.57	2.40	3.39
N	608	590	608	596	596	565	587	542

Source: Developed by the author.

ture is 20.40%, the average GDP per capita is USD 2087.13, which shows that most of the sampled countries are in the lower middle-income bracket as defined by the World Bank in 2022. The level of trade openness is around 30% of GDP on average. The POLITY 2 score is 2.61 on average, which shows that countries have weak democratic institutions; the EFI score is 5.77 on average, which shows that most countries have moderate economic freedom. The net aid received from official donors is low, at around 7% of GDP on average. The extent of urbanization is still low, with the population in the largest cities being a third of the urban population. On average, revenue is below a third of GDP, demonstrating the critical role that revenue collection agencies must play in these countries.

In *Table 2*, we present results for checking potential multicollinearity among variables. The coefficients for any pair of explanatory variables

are less than 0.50, are positive, negative and significant. This demonstrates that multicollinearity is not a significant issue, and we can apply our variables within the same model. Strong correlations exist between government expenditure and all variables.

In *Table 3*, we present findings that show that all variables are stationary after first differencing, except for ODA and TE. Thus, there is potential for co-integration among variables.

The study employed Kao's method to test for cointegration. *Table 4* shows that the hypothesis of no cointegration is rejected using all five statistics. Therefore, one can conduct analysis using either the ARDL or ECM models.

Empirical models are estimated using the ARDL technique as follows: Model (1) with all the variables to examine their contribution to government expenditure. This is followed by estimating models (2), which incorporate

Table 2
Correlation

	GEP	GDPPC	TO	POLITY 2	EFI	ODA	UBN	TE
GEP	1.000							
GDPPC	0.536**	1.000						
TO	0.156**	0.465**	1.000					
POLITY 2	0.167**	0.124**	0.305**	1.000				
EFI	0.129**	0.155**	0.316**	0.497**	1.000			
ODA	-0.344**	-0.046	-0.300**	-0.343**	-0.202**	1.000		
POP	-0.143**	-0.092**	0.193**	-0.332**	-0.119**	0.121**	1.000	
TE	0.088**	0.002	0.032	0.134**	0.045	-0.062	-0.062	1.000

*significant at 10%, **significant at 5% and ***significant at 1%.

Source: Developed by the author.

Table 3
Unit root

Variable	IPS		FISCHER		Order
	Levels	First Difference	Levels	First Difference	
GEP	-1.2453	-6.0487***	1.3673	-22.3086***	I(1)
GDPPC	-0.3818	-4.6222***	5.3652	-15.8648***	I(1)
TO	-0.4504	-3.0933***	4.6821	-7.9772***	I(1)
POLITY 2	-1.5436	-3.654***	-3.6687***	-13.5583***	I(1)
EFI	-1.6340	-4.4094***	-0.4384	-11.6245***	I(1)
ODA	-2.5334***	-7.1881***	-5.3158***	-26.6101***	I(0)
UBN	-0.9303	-2.2699***	-0.0382	-3.7826***	I(1)
TE	-2.3263***	-5.7803***	-4.2108***	-21.1573***	I(0)

*significant at 10%, **significant at 5% and ***significant at 1%.

Source: Developed by the author.

institutional quality variables one at a time. It allows us to appreciate the changes in results and potentially isolate the effect of each measure. Model (4) is the final estimation that incorporates all variables. This proves to be the best model for predicting government expenditure among emerging and fast-growing economies. Findings (Table 5) show that government expenditure returns to equilibrium after changes in its covariates at a speed of 45% on average, as shown by all models. It is the speed at which the model corrects itself when there are deviations in the short run. In the short run, none of the explanatory variables is significant, in all models, except institutional quality variables. Though significant at the 10% level, the POLITY 2 variable has a negative effect on government expenditure in model (4). The economic freedom index is negative and significant at the 5% level in models (3) and (4). This shows that, in the short run, strengthening institutional quality helps to control excessive government expenditure. All variables are significant using the long-run model.

The impact of GDP per capita on government expenditure remains positive in all four models. This is demonstrated by the coefficients, which are significant at the 1% level. In other words, as economic welfare improves coupled with a rise in GDP, the level of government expenditure increases in the long term. This

is consistent with Wagner's law, which argues that public expenditure increases as national income rises. The value of our coefficients shows that there are marginal changes in public expenditure of about 0.02% for every 10% change in GDP per capita. Findings are consistent with past studies [19, 57, 58], which show that significant changes in national economic welfare have a positive contribution to public spending. This is linked to the emerging demand for public goods as the government seeks to meet the needs of citizens and develop initiatives.

Taxation revenue has a positive and significant effect on government expenditure in the long run. This is demonstrated by coefficients that are significant at the 1% level throughout. A 10% rise in tax revenue would induce a growth in public spending of 1.94%, using model (1). The size of the coefficient increases slightly with the introduction of the POLITY 2 variable and falls in models (3) and (4) with the introduction of the economic freedom index variable. This shows the importance of the choice of institutional variables in modeling the effect of taxation revenue. Findings are consistent with past studies [59, 60] that support the tax-spend hypothesis by Friedman in 1978. Thus, the government's potential to improve spending is enhanced by a rise in tax efforts. This has implications for effective monitoring where countries have unpredict-

Table 4
Tests for cointegration

Kato Test for cointegration		
H0: No cointegration		
Ha: All panels are cointegrated		
Cointegrated Vector: Same	Kernel:	Bartlett
Panel means: Included	Lags:	1.79 (Newey-West)
Time trend: Not Included	Augmented Lags:	1
AR parameter: Same		
Modified Dickey Fuller t	-3.4767	0.0003
Dickey Fuller t	-3.1928	0.0007
Augmented Dickey-Fuller t	-1.8275	0.0338
Unadjusted Modified Dickey-Fuller t	-6.7683	0.0000
Unadjusted Dickey-Fuller t	-4.4821	0.0000

Source: Developed by the author.

able revenue flows and appetite for spending. The consequences are adverse, as rising spending would entail seeking help from taxpayers in the future to avert a budget deficit.

The study shows that development aid has no effect in the long term when considering models (1) and (2). The introduction of economic freedom index in models (3) and (4) results in a positive and significant coefficient. It rises with both measures of institutional quality in the model. This shows the significance of strong institutions in curbing spending that may rise with the receipt of aid. The contribution of aid to spending is supported by past studies [42, 61]. Though it may come with high dependency and administrative costs, aid increases the incentive to spend as a cheaper source of funding. The effect differs on whether we consider capital or recurrent spending.

Trade openness has a negative and significant effect on government expenditure, considering models (1) to (3). This means that as countries become more open to international trade, less is spent by the government. This is consistent with [62], who argues that an increase in trade flows may mean a fall in revenues, which may ultimately lead to a reduction in spending. On the other hand, when we incorporate both measures of institutional quality into the model, we find that the effect of trade openness becomes positive. This could be explained by the countries that are faced with outside shocks as trade flows increase.

This may be coupled with high spending as governments endeavor to give access to more goods and services while reducing the impact of global shocks. As countries open their economies, local demand rises, which should be met by a rise in spending, as supported by past studies [59, 45].

This study's findings differ from several previous studies on our proxy for urbanization. In general, as the urban population rises, the expectation is that more government expenditures will occur. In our study, the effect is negative in all our models, which is similar to [63], who found the same sign in the context of South American countries. They found that urbanization reduces government spending.

Findings on institutional quality have been linked to other covariates earlier in the discussion. The POLITY 2 variable is insignificant throughout the two models estimated. The variables measuring the economic freedom index are significant in all two models. Both variables have proven to be important in modeling government expenditure. The negative impact of EFI variables suggests that it is crucial in bringing restraint to spending, as supported by empirical evidence. [63] shows that institutional quality has a negative effect on public spending. As institutions improve, they mitigate the level of public spending. The effect is linked to the way in which public spending is distributed. Past studies [12, 64, 65] argue that the allocation of expenditure depends on whether the government autocratic or democratic. The former allo-

Table 5
Empirical models

Long run models				
Models	1	2	3	4
GDPPC	0.002***	0.002***	0.003***	0.002***
TE	0.194***	0.196***	0.135***	0.136***
ODA	0.06	0.056	0.102***	0.114***
TO	-0.061***	-0.066**	-0.050**	0.038**
UBN	-0.457***	-0.445***	-0.362***	-0.397***
POLITY 2		0.012		0.038
EFI			-0.768***	-0.988***
Short run models				
ECT	-0.447***	-0.441***	-0.436***	-0.450***
GDPPC	-0.001	-0.001	-0.001	-0.001
TE	-0.021	-0.017	-0.001	0.013
ODA	-0.138	-0.053	-0.108	-0.086
TO	-0.042	-0.05	-0.029	-0.04
UBN	-0.485	-1.174	0.812	-1.64
POLITY 2		-0.236		-0.279*
EFI			-1.553***	-1.326***
C	12.032***	11.803***	11.684***	13.217***

*Significant at 10%, **significant at 5% and ***significant at 1%.

Source: Developed by the author.

cates more to military spending and less to education. In this study, countries are democratic on average which suggests that there is balanced spending on different forms of expenditure. There is an aspect of carrying out activities that allow for the extraction of rents while growing economies at a slow pace. However, strengthening institutions would lower the need to monitor the efficiency of public spending.

5. Conclusions and policy implications

This study sought to isolate the main determinants of government spending and the role of institutional quality in emerging and fast-growing economies in Africa. It employs data from 1990 to 2020 for 19 countries. While the study is more inclined toward the Wagner law, it included other variables that capture the current context. This study applied an autoregressive distributed lag model to test both long-term and

short-term dynamics. This study demonstrated that there is joint causality and long-run causality between the selected variables and government expenditure. Short-term causality is not confirmed.

This study has demonstrated that the Wagner law still holds, and economic growth is coupled with rising expenditures. This means that as the government invests more in expanding the economy's potential, more will be spent. The more governments are involved in public projects to boost national income, the more money is spent. The availability of tax revenues increases the appetite for government spending, which confirms the tax-spend hypothesis. This indicates the importance of decisions that restrain the use of public funds; otherwise, huge deficits are imminent. This study demonstrated that official development aid creates a buffer on which the government can draw additional spending resources.

This complements the available local resources from tax revenues. This study demonstrated that more is spent when an economy is susceptible to global events through increased trade flows. Much uncertainty is experienced when countries are open, and spending more public funds would mitigate that. This study demonstrated that selecting the correct institutional variable is key. It appears that the economic freedom index is more effective than the POLITY 2 variable in controlling government expenditure.

This study suggests that affording citizens more economic freedom, such as strengthening the legal system, having sound money, increasing regulation, and having the freedom to trade, would help optimize government spending. It is critical that countries strengthen property rights and bring stability to the macroeconomy. Otherwise, by strengthening democratic institutions, countries may help improve monitoring government expenditure patterns and bring more accountability to public officials.

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