

EFFICIENCY OF GOVERNMENT SPENDING IN THE ECOWAS SUB-REGION: DO THE ENTITIES DIFFER SIGNIFICANTLY AND WHERE LIE(S) THE DIFFERENCE?

¹Dada. M. A; ¹Posu. S. M. A; ¹Adedeji, A. O; ¹Ojo O. T; ²Owoeye, S. D.

¹Department of Economics, Federal University of Agriculture, Abeokuta, Nigeria.

²Department of Banking and Finance, Federal University of Agriculture, Abeokuta, Nigeria.

Corresponding Author's email: mattabeyvoice@gmail.com



Abstract

Prior to taking action in any event, it is often important to ponder on the voice of wisdom from a popular adage that says, "birds of the same feathers flock together". The knowledge from this adage is relevant when a set of different elements proposed to front a common currency to be called ECO in the West African sub-region. It is no gain saying that this proposal has been widely debated and efforts have reached an advanced stage to achieve this feat. This paper examines the efficiency of government spending in this respect. Are the spending efficiencies of these different entities the same? Alternatively, is there a significant difference in the spending efficiency variable? To achieve this objective, efficiency variables were computed for each country using GDP-Government spending ratio otherwise known as output-input ratio or output per unit of input. Both parametric and non-parametric tests were carried out on the computed efficiency variables. The result shows that there is significant difference in the efficiency variables. To find out where the difference lies, a post hoc analysis was conducted and the result shows that the difference lies in Nigeria. The study called on all stakeholders in the sub-region to identify government spending on projects that could yield greater efficiency in order to boost the growth of member countries. The study concluded that despite the uniqueness in cultural heritage and socio-economic attributes, the efficiency of government spending still varies considerably across member countries in the ECOWAS sub-region.

Keywords: Government spending efficiency, parametric test, non-parametric test, common currency, output-input ratio.

Introduction

The total output resulting from all economic activities in any country could be attributable to two economic agents namely the *private* agent and the *public* agent. Both private and public resources are usually involved in economic activities that generate the total output of the economy and its growth rate (Dixit, 1997; and Kirman, 2004). By virtue of their nature, private sector produces private goods while public sector produces public goods, which are not in the best interest of private agent. Both agents are confronted with input constraints. The private agent maximizes their output behaviour and minimizes the cost by employing the correct input combination for the best possible output. If the public agent behaves in similar manner, the maximum output is expected to be associated with the lowest minimum cost. Often, a productivity measure is expressed as the ratio of an aggregate output to a single input or an aggregate input used in a production process, i.e. output per unit of input, typically over a specific period.

Government spending enters the production function as an input and hence acts as a constraint to output because of limited supply. The efficiency matter therefore has to do with getting more output from a given units of an input or a set of inputs or level of spending. The truth is that acquisition of the set of inputs requires spending, or government spending in the sense of public finance. Efficiency is a relative concept that is compared with a two similar situations. So, given two public projects on which the same given amount is spent, the project that yields higher productivity is considered more efficient. This shows that productivity is a measure of efficiency while outputs of physical goods and services, which are usually expressed in terms of quantity, volume, kilograms, and so on, and have monetary values, are used to capture productivity. Accordingly, a unit of dollar spent by a given government can yield different level of efficiencies. Efficiency is gained when more output is derived from a fixed amount of government spending giving inflation and exchange rate in the economy, on intertemporal comparatively basis or across two projects.

For instance, a fixed amount in US dollar may deliver 10km worth of road in country A while the same amount ends up delivering 7km worth of road in country B. This implies higher spending efficiency in country A than in country B. In this case, given the same budget size in the two countries, country A will experience greater output in the overall compared with country B. Hence, budget size might not be an issue but the efficiency with which public resources are being used. In line with this view, it is very important always to consider not only the size of available monetary resources government is able to supply or provide in explaining the variation in the rate of economic growth across countries but also the efficiency attached to the use of such money. For further exposition on this, see, (Angelopoulos, Philippopoulos and Tsionas 2008; Kumbhakar and Lovell 2000; Hoyo, Espino and Toribio 2004; Charnes, Cooper and Rhodes 1978). The use of US dollar in the ECOWAS sub-region of Africa would yield lesser degree of efficiency in the entire sub-region compared with the situation of using own common currency, as contained in the initial goals of international organization when it was formed (Masson and Pattillo, 2001).

Government efficiency variable therefore becomes an important factor to give consideration in explaining variations in the rate of economic growth across the globe. Although, a country may have constraints in its budget size but such a country might be better off if efficiency of government spending is high. However, a country that has constraints both in spending size as well as spending efficiency is at a knife-edge. Efficiency variable therefore could be described as a complementary factor to limited resources. Where the resources are glaringly very limited in supply, high efficiency could be a strong factor to cause variation in economic growth. The fact that a country can actually be a victim of both limited resources as well as low efficiency in the use of these limited resources was acknowledged by Soludo (2015) who identified two major challenges facing the Nigeria economy. The two challenges are the efficiency of government spending as well as a binding budget constraint. Soludo (2015) succinctly illustrated it thus:

“No matter how efficient a father with a monthly salary of ₦50,000 is at managing the family resources, I cannot see how he could deliver on a promise to buy a brand new Peugeot 406 for each of his three children in a year. Even with all the loopholes and waste closed, with increased efficiency per dollar spent, there is still a binding budget constraint. To deliver an efficient national transport infrastructure alone will still cost tens of billions of dollars per annum even by corruption-free, cost-effective means.”

The efficiency of government spending has become a great concern of researchers and stakeholders in the recent time in public finance debate. In the developed and many transition economies, Heller and Hauner (2006) observed that increasing efficiency achieved from

government spending turned out to be a more acceptable approach or guide on the opposing choice of age-related spending and increased tax competition. In low-income countries, increased spending efficiency is complementary to increased social spending if the Millennium Development Goals are to be achieved even by 2030. Emerging markets, in turn, may seem under less pressure of this kind, given their rapid growth, but it is well known that the demand for public services tends to increase rapidly as countries become richer as Wagner proposed. For instance, the number of vehicles in one major city in any developing countries in the recent time may be greater than the total number of vehicles available in the whole country a hundred or two hundred years ago. Higher efficiency therefore becomes the only way to avoid a heavy burden of taxation. It cannot be ruled out that efficiency variable could have notable effect on other macroeconomic variables that are very crucial to the welfare of the citizens of a country.

A common currency in the ECOWAS sub-region would tend to boost both productivity and efficiency of government spending. ECOWAS, since its formation in 1975, included among its goal to have a common currency (Masson and Pattillo, 2001). The motive behind this goal was to achieve broader integration process that would enhance regional trade and common institutions. Political problems and other economic priorities in several of the countries in the region have been inhibiting the achievement of the goal despite the various attempts. Several projections to launch the common currency have been made and postponed and will still be postponed again (Ecofin Agency, 2021). The impact of the coronavirus pandemic on the macroeconomic performance in the region too has not helped matters. The Heads of States and Governments of the six Anglophone countries in the region met in Ghana on April 20, 2000. The leaders declared their intention to proceed to monetary union among the non-CFA franc countries of the region by January 2003. This was to be the first step toward a wider monetary union including all the ECOWAS countries, a year later in 2004.

Dewast (2019) expressed the view of experts as being divided on the impact the adoption of the common currency would have on the region's economy. Experts are skeptical about the full cooperation of the eight member states, which use CFA franc: a currency fully backed by France. This skepticism among others seems to account for the series of postponements, as implementation of the policy is perceived to be a move against French colonialism (Kavas, 2021). Negotiations for the joint currency have been in the works for 30 years (Dewast, 2019; Ordu, 2019; El Jai, 2020). Besides the initial launching that was intended in 2003, other launchings of the ECO were postponed in 2005, 2010, 2014, and 2020.

The conditions that would facilitate the actualization of the launching seem to be unattainable, considering the heterogeneous nature of the countries. Principally, the conditions include attainment of (i) a budget deficit of not more than 3%; (ii) an average annual inflation rate of less than 10%, a single digit inflation; (iii) central bank financing of budget deficits should be no more than 10% of the previous year's tax revenue; and (iv) availability of gross external reserves worth at least three months of imports. Considering the heterogeneity in the 15 member states, the achievement of these conditions may be far from reality. Based on the 58th Ordinary Session of the ECOWAS Authority of Heads of State and Government held January 23, 2021, a set of new guidelines regarding the community's single currency and market was established (Ecofin Agency, 2021). The new guideline was targeted to achieving a new macroeconomic convergence and stability deal among member countries by January 1, 2022, and it is expected to facilitate a new roadmap for the single currency by 2025.

The proposal to float a common currency to be called (ECO) by countries in the West African sub-region is no longer a myth as the plan has reached an advanced stage. While the launching of ECO

has suffered various postponements, the political and economic will of the Heads of States and Governments in the region are not totally lacking. The eight francophone-countries use the CFA franc that has its root in France as a 'common currency' while the remaining 7 countries in the region use own local currency. Government spending in the region is facilitated by the exchanges of the CFA franc and the other own local currencies in the region with foreign currencies of the rest of the world. How then is government spending captured in the region? Is spending efficiency in these countries the same or significantly different? In which of the countries do the differences exist? In particular, what are the vital issues to the implementation of the proposed common currency regime in the ECOWAS sub-region?

In the light of this, this paper is obliged to test whether spending efficiency variable differ significantly across these countries or otherwise. In case of significant difference in the efficiency variable, the paper is also set to unfold where the difference lie. The finding becomes very helpful in making an objective evaluation of the proposed plan.

The remainder of this paper is structured as follows: following this introductory section is Section 2, which presents a brief literature review. Section 3 presents the analytical procedures. Next to this, is Section 4, which presents the empirical results while Section 5 concludes the study.

A Brief Literature Review

The major economic problem of every society from time immemorial is problem of scarcity. Human wants are numerous, insatiable, competitive and conflicting in nature. This general view of scarcity is applicable to both individual and public agents. One logical way of surmounting the problem of scarcity is by prudent management to ensure maximum output is derived from a given level of input. Good governance begins to be a good source of economic growth. According to Easterly and Levine (1997), good government has been given a general consideration, as it remains a crucial determinant of economic growth. On this basis, efficiency of government spending at the aggregate level has thus become a subject of interest among scholars and this has generated a rapidly growing body of literature.

The pioneer work of Farrell (1957) identified two types of efficiency, namely; technical efficiency (TE) and allocative efficiency (AE). Technical efficiency is defined as the input-output relationship, and it "reflects the ability to avoid waste by producing as much output as input usage would allow and, conversely, by using as little input as output production would allow,". Allocative efficiency is defined as the optimal allocation of input factors into productive sectors. Angelopoulos, et al.,(2008) investigated the relationship between fiscal size and economic growth using size-efficiency mix and built on the work of Afonso, Schuknecht and Tanzi (2005) by constructing a measure of public sector efficiency in each country and time-period. A sample of 64 developed and developing countries were involved in the study. The measure was constructed by calculating an output-to-input ratio and obtained an estimate of technical efficiency of public spending for 52 countries for the time-period (1995-2000) applying a stochastic frontier analysis (SFA). Using the two measures constructed, the result shows that there is a non-monotonic relationship between fiscal size and economic growth, which depends critically on the size-efficiency mix. The study established that there is high correlation ($r=0.75$) between the two measures of government efficiency, namely technical efficiency (TE) and public sector efficiency (PSE) constructed in the study and hence any of these measures could be used.

El Jai (2020) investigated the feasibility of ECO currency in the ECOWAS sub-region. The study employed descriptive analysis over the period 1980–2018 to capture the trends in the variables

of choice. The structural VAR employed for the period 2000–2018 emerged with some important findings. Correlations results showed evidence of little correlation of shocks of most of the member countries with respect to Nigeria. Nominal shocks were not correlated at all across the countries, indicating some possible disconnections of monetary policies in Nigeria with other member countries or further evidence on the asymmetry of the structure of these economies. National output was seen as the only variable that has common sources of variability in all countries except for Burkina Faso. It was found that real exchange rate and prices were driven by different sources from a group of countries to another, which portrayed a picture of dissimilarity of business cycles in ECOWAS area.

Devarajan and de Melo (1987) investigated the participation of the member countries of ECOWAS in the West Africa Economic and Monetary Union being used by the Francophone countries with the CFA franc, and the West Africa Monetary Zone of the Anglophone countries. The results showed that exchange rate misalignments constitute a major obstacle to higher growth in the sub-region but that on the average, Francophone zone behaved much better than those in the Anglophone zone did. Hefeker (2010) investigated fiscal reform and monetary union in West Africa. The study concentrated on the interactions among fiscal policy, structural reform, and monetary union and found that symmetric monetary policy causes fiscal authorities to adopt a distortionary fiscal policy. The action was known to weaken structural reforms. The worse situation occurred with asymmetric monetary policy as it caused explosive polarization among the member countries.

Using a set of methodologies including convergence criteria, impulse responses, variance decompositions, and correlations of shocks, Mati, Civcir, and Ozdeser, (2019) analyzed the preparedness of the member countries of ECOWAS for ECO currency. The study revealed statistically significant asymmetric shocks across the member countries with a conclusion that the sub-regions is not yet ready for the take-off of full-fledged common currency. Evidence of harmony of policies is lacking in the entire sub-region and acts as a great impediment to the implementation of a common currency. Alagidede, Coleman, and Cuestas (2012), Ekong and Onye (2012), and Jidoud (2012) separately established asymmetric shock among the sub-region.

Other studies on efficiency of government spending include Gupta and Verhoeven (2001), Afonso, Schuknecht and Tanzi, (2010), Tanzi and Schuknecht (1997, 2000), David and Annette (2008), Angelopoulos, Philippopoulos, and Tsionas, (2008), Santiago and Gaobo (2005), Afonso and Kazemi (2017), Mohamed, Nader and Hedi (2018). These studies have employed various measures of efficiency. Public sector efficiency have been measured by relating government spending to socio-economic indicators that are assumed to be targeted by such spending, which includes education enrolment ratios or infant mortality rate. For instance, government school feeding project of the federal and state government in Nigeria may be done to target increased public school enrolment to ensure that more Nigerian-child have access to good primary and secondary education as well as reducing diet-related diseases and infant mortality rate among the school children in Nigeria. The outcome can be used to evaluate the efficiency of expenditure allocated for these purposes and to make comparison from time to time.

Cross-country results reveal that considerable differences exist in efficiency variable across countries, irrespective of their income status. The literature on this subject matter reveals three types of scores per policy sector as being computed for each country. They are (i) Public sector performance (PSP) which measures only outcomes; (ii) Public sector efficiency (PSE) which relates outcomes to spending with a simple ratio; and (iii) Data Envelopment Analysis (DEA) scores that measure efficiency relative to a frontier. The literature gives insights into two disaggregated and

aggregated analyses. Aggregated analysis embarks on the use of total government expenditure while disaggregated analysis differs a bit by decomposing total government spending into various policy sector such as education, health, and agriculture, before engaging in the computation process in respect of each of the three stated measures.

The public sector efficiency was therefore computed as the summation of the ratio of public sector performance to public sector spending. This has been expressed in form of equation as

$$f_i = \sum_{j=1}^n \left(\frac{h_{ij}}{g_{ij}} \right) \quad (1)$$

where

f = government sector efficiency

h = government sector performance

g = government sector spending

From Equation 1, f is expressed as the ratio of h_{ij} to g_{ij}

It is equally important to note an important issue associated with the DEA scores. This is the fact that the impact of spending on outcomes is likely to occur with lags. It could imply, for example, that a country that decides to raise education spending at first experiences a decrease in efficiency. The literature has sometimes tried to deal with this problem by taking averages of inputs and outcomes over several years. However, to remain with the above, if a rise in spending occurs at the end of the time window over which it is averaged, and its impact occurs after the end of the window, a decrease in efficiency could still be measured. It is thus assumed that the impact is contemporaneous, for lack of a better way to solve the worrisome issue. The impact of this on the results should be limited, given that episodes such as in the example above are actually rare; in most cases, inputs as well as outcomes exhibit a high level of persistence.

The DEA efficiency of public spending is measured by comparing actual spending with the minimum spending theoretically sufficient to produce the same actual outcome. The underlying theory was developed in Debreu (1951) and Farrell (1957) and extended, in particular, in the work of Seiford and Thrall (1990). While most of the prior studies involved modeling impact or impact analysis, this study is interested in finding out whether a significant difference exists in the efficiency of government spending and as well as unfolding where such a significant difference lies, given the proposed common currency agenda among members of the ECOWAS sub-region.

Analytical Procedures

This study employed an aggregated analysis in which government spending and output are considered in aggregate form. Accordingly, efficiency is measured as GDP in current US dollar as a ratio of total government spending, which is also in current US dollar for each year. These measures allow for computation of efficiency scores for each year and then computed the average efficiency for each country over the sampled period. The tests were carried out on whether there existed a significant difference in the efficiency of government spending across countries or otherwise. This is achieved by using one-way analysis of variance (ANOVA).

The one-way ANOVA F-test aims at decomposing the total variance of all the groups into that, which is due to the variation between the groups and the variation within the groups. The equation is expressed as

$$S_T^2 = S_B^2 + S_W^2 \quad (2)$$

where

S_T^2 = Total variance

S_B^2 = Variance of between groups

S_W^2 = Variance of within groups

Since ANOVA is usually organized around a ratio, that is the ratio of between groups variance to the within groups variance, the F-statistic thus is given by

$$F = \frac{S_B^2}{S_W^2} \quad (3)$$

where $S_B^2 = \frac{SS_B}{K-1}$ and $S_W^2 = \frac{SS_W}{N-K}$

SS_B = sum of squares of between groups variance.

SS_W = sum of squares of within groups variance

$K - 1$ = degree of freedom of the between groups

$N - K$ = degree of freedom of the within groups

The non-parametric test, specifically Kruskal-Wallis one-way ANOVA was used to assess whether more than two independent groups differ with respect to an ordinal dependent measure. The test serves as an alternative to parametric ANOVA in case the dependent measure fails to meet the assumptions of the F-test. The test statistic, evaluated using the chi-square distribution is thus given by

$$W = \frac{12}{N(N+1)} \sum_{j=1}^n \frac{R_j^2}{n_j} - 3(N+1) \quad (4)$$

Where

N = the total number of observations

n_j = the number of observations for the categories of the independent variable

R_j^2 = the squared sum of the ranks for each category

The test requires only that the dependent variable measure be ordinal. The general form of the null hypothesis tested by the statistic provided in Equation 4 is

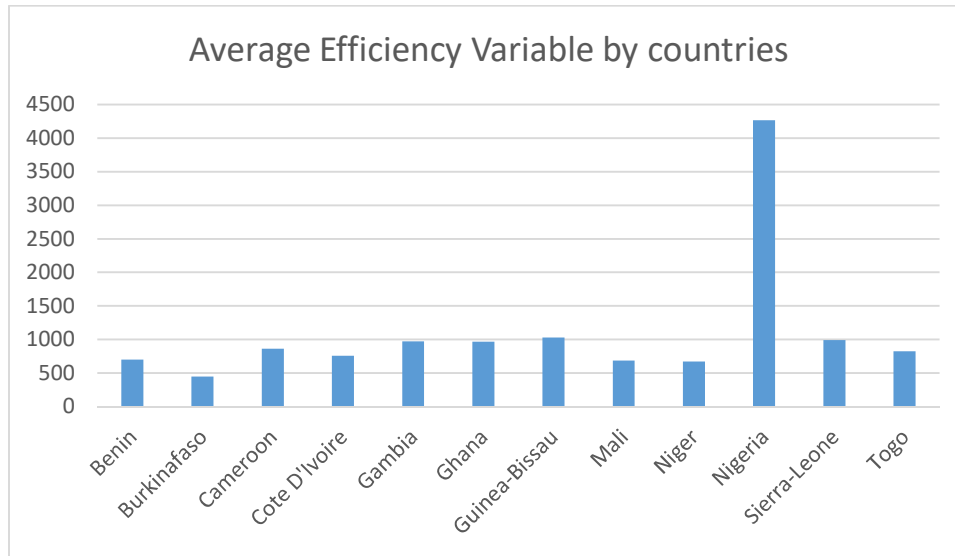
H_0 : There is no significant difference in the distribution of the ranks of the dependent measure across the groups representing the independent measure.

Empirical Results

Distribution of efficiency variables by countries

The distribution of efficiency variables by countries is shown in Figure 1. From the figure, it is revealed that Nigeria has the greatest efficiency on the average. This is followed by Guinea-Bissau

and then Gambia as well as Sierra Leone. Burkina-Faso has the least spending efficiency in the group.



Source: Authors' Compilation

The Parametric Tests

The result in Table 1 showed that there is significant difference in the efficiency of government spending in the selected ECOWAS countries. The hypothesis of no significant difference could be comfortably rejected at 1 percent level of significance ($F=22.002$; $df= 5/192$; $p<0.01$). This suggests that there is significant difference in the efficiency of government spending in the ECOWAS sub-region.

Table 1: Result of One-Way ANOVA

	Sum of Squares	df	Mean Square	F-ratio	P-value
Between Groups	938.201	5	187.640	22.002	0.000
Within Groups	1637.470	192	8.528		
Total	2575.671	197			

Source: Authors' Compilation

Multiple Comparisons

The study proceeded by conducting a post-hoc multiple comparisons. The result of the post-hoc multiple comparisons presented in Table 2, however, diverges a bit from the previous result since some pairs of countries are homogeneously related in term of their efficiency attributes.

Table 2: Result of Post Hoc - Multiple Comparisons

	(I) group	(J) group	Mean Difference (I-J)	Std. Error	P- value	95% Confidence Interval	
						Lower Bound	Upper Bound
LSD	1) Cote d'Ivoire	2 Senegal	3.32239*	0.71894	0.000	1.9044	4.7404
		3 Ghana	0.49709	0.71894	0.490	-0.9210	1.9151
		4 Gambia	1.27871	0.71894	0.077	-0.1393	2.6967
		5 Nigeria	-1.96544*	0.71894	0.007	-3.3835	-0.5474
		6 Burkina Faso	4.66779*	0.71894	0.000	3.2498	6.0858
	2) Senegal	1 Cote d'Ivoire	-3.32239*	0.71894	0.000	-4.7404	-1.9044
		3 Ghana	-2.82530*	0.71894	0.000	-4.2433	-1.4073
		4 Gambia	-2.04369*	0.71894	0.005	-3.4617	-0.6256
		5 Nigeria	-5.28783*	0.71894	0.000	-6.7059	-3.8698
		6 Burkina Faso	1.34540	0.71894	0.063	-0.0726	2.7634
	3) Ghana	1 Cote d'Ivoire	-0.49709	0.71894	0.490	-1.9151	0.9210
		2 Senegal	2.82530*	0.71894	0.000	1.4073	4.2433
		4 Gambia	0.78162	0.71894	0.278	-0.6364	2.1997
		5 Nigeria	-2.46253*	0.71894	0.001	-3.8806	-1.0445
		6 Burkina Faso	4.17071*	0.71894	0.000	2.7527	5.5887
	4) Gambia	1 Cote d'Ivoire	-1.27871	0.71894	0.077	-2.6967	0.1393
		2 Senegal	2.04369*	0.71894	0.005	0.6256	3.4617
		3 Ghana	-0.78162	0.71894	0.278	-2.1997	0.6364
		5 Nigeria	-3.24415*	0.71894	0.000	-4.6622	-1.8261
		6 Burkina Faso	3.38909*	0.71894	0.000	1.9710	4.8071
	5) Nigeria	1 Cote d'Ivoire	1.96544*	0.71894	0.007	0.5474	3.3835
		2 Senegal	5.28783*	0.71894	0.000	3.8698	6.7059
		3 Ghana	2.46253*	0.71894	0.001	1.0445	3.8806
		4 Gambia	3.24415*	0.71894	0.000	1.8261	4.6622
		6 Burkina Faso	6.63323*	0.71894	0.000	5.2152	8.0513
		1 Cote d'Ivoire	-4.66779*	0.71894	0.000	-6.0858	-3.2498

Dependent Variable: X1, *Mean difference is significant at the 0.05 level

Source: Authors' Compilation

The result in the table showed that there is no significant difference in the efficiency of government spending between Cote d'Ivoire and Ghana ($p>0.05$); Cote d'Ivoire and Gambia

($p > 0.05$); Ghana and Gambia ($p > 0.05$) and Burkina Faso and Senegal ($p > 0.05$). These pairs of countries are said to belong to the same level in term of how efficient they are in spending taxpayer money measured in term of output associated with a unit of dollar spent. Countries are not rated in term of how much is spent but based on output resulting from such spending. It is not the size of the budget that matters but the magnitude of the output it generates.

Tests of Normality

The test of normality was further conducted to find out if there is need to advance to the use of non-parametric test, the robustness of which does not depend on the normality of the distribution. It is distribution free and hence can be used further to establish the reliability of the result previously obtained from the use of parametric tests.

Table 3: Result of Normality Tests

	GROUP	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
		Statistic	df	P-value.	Statistic	df	P-value
EFFSCR	Benin	0.139	28	0.175	0.935	28	0.082
	Burkina-Faso	0.157	28	0.076	0.955	28	0.262
	Cameroon	0.100	28	0.200*	0.964	28	0.426
	Cote d'Ivoire	0.089	28	0.200*	0.981	28	0.873
	The Gambia	0.152	28	0.095	0.967	28	0.502
	Ghana	0.096	28	0.200*	0.971	28	0.613
	Guinea Bissau	0.120	28	0.200*	0.953	28	0.232
	Mali	0.182	28	0.018	0.852	28	0.001
	Niger	0.156	28	0.081	0.930	28	0.061
	Nigeria	0.259	28	0.000	0.838	28	0.001
	Sierra Leone	0.111	28	0.200*	0.963	28	0.417
	Togo	0.148	28	0.117	0.898	28	0.010

**. This is a lower bound of the true significance; a. Lilliefors Significance Correction*

Source: Authors' Compilation

The Non-parametric tests

There is need to conduct a non-parametric test to determine if the efficiency variable differs significantly across sample or there is no significant difference. The particular non-parametric test used is Independent-Samples Kruskal-Wallis Test. The null hypothesis of no significant difference is tested against the alternative hypothesis of significant difference. The result as presented in Table 3 shows that the null hypothesis can be comfortably rejected to conclude that there is significant difference in the average efficiency variables across samples.

Table 4: Result of Nonparametric Test

Null Hypothesis	Test	P-value	Decision
The distribution of Efficiency variable is the same across categories of GROUP.	Independent-Samples Kruskal-Wallis Test	0.000	Reject null hypothesis

Asymptotic significances are displayed. The significance level is 0.05

Source: Authors' Compilation

Conclusion

This paper focused on the efficiency of government spending in the ECOWAS sub-region as the proposal to launch a regime of common currency, called ECO, has reached an advanced stage. The paper tests whether efficiency variable differs significantly or otherwise across countries who constitute the major stakeholders in this economic arrangement. Efficiency variables were computed for each country using GDP as a ratio of aggregate government spending, which is otherwise known as output per unit of input since government spending enters the production function as input to contribute to production across economic sectors. Both parametric and non-parametric tests were conducted to find out if there was significant difference in the means of efficiency variables across countries in the sub-region. The result showed that there was significant difference in the efficiency of government spending in this sub-region.

The study further investigated the member country(s) where this difference lies. The test result indicated the difference lies with Nigeria. It hereby implies that the common currency agenda may not yield the desired objective if significant difference exists in the efficiency of government spending in all the member countries. The difference that lies with Nigeria in terms of government spending efficiency may be strong enough to jeopardize the take-off of ECO. In order to forge ahead and successfully launch and implement the monetary policy in the sub-region, the Heads of States and Governments may need to recognize the higher efficiency existing in Nigeria and factor the same into the operations of the policy within the sub-region. In essence, the benefits derivable from the government efficiency would certainly vary across the member countries. Following the heterogeneity of the countries involved, one would expect some levels of differences. The differences, however, must be relative and not statistically significant enough to jeopardize the efficiency of government spending, and thus, the goal of launching the ECO.

Every dollar earned by each of the member countries must be optimally used to yield the greatest possible output in order to speed up the rate of economic progress in the region. Where this is missing, the common currency agenda may be unproductive and eventually collapse. The urge to improve government spending must be re-engineered. This strategy will close up the relative government spending efficiency gap among the countries. The study calls on all stakeholders in the unique project to jerk up the spending efficiency, which guarantees getting more output from the same set of inputs. Productivity, as generally known, can be accelerated not only by raising expenditure but also by raising the efficiency of government spending. The study therefore suggests that every stakeholder should focus on how to raise efficiency of government spending. Member countries should show greater concern on how government spending increases efficiency not only across different public projects during a specific period but also over time for the same type of project. The approach would propel economic growth and development in the individual member countries as well as in the ECOWAS sub-region as a whole. The study therefore

concluded that despite the uniqueness in terms of level of development, cultural heritage, and socio-economic attributes, the efficiency of government spending still varies considerably across member countries in the ECOWAS sub-region.

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