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Angela Mucece Kithinji
Faculty of Business and Management Sciences
University of Nairobi, Kenya.

Correspondence:
Angela Mucece Kithinji
Faculty of Business and Management Sciences
University of Nairobi, Kenya.

The Control Effect of Government Revenue on Government Expenditure and Economic Growth of the Kenya Government

Angela Mucece Kithinji

Abstract
Government expenditure in many developing countries is high because governments need to finance high expenditure development projects for purposes of achieving the targeted economic growth. These countries tax their citizens heavily to raise enough finances to finance their expenditures. Sometimes governments are forced to borrow since monies generated internally are not sufficient to finance both recurrent expenditures and high value capital projects. In quite a number of developing countries huge expenditures are incurred and instead of realizing high economic growth, the economic growth realized is dismal. It was thus feasible to establish the influence of the government revenue on the relationship between government expenditure and economic growth of the Kenyan government. The study employed a causal research design. The period under study ranged from 2002 to 2017. The study used secondary data which was extracted from the National Bureau of Statistics, and National Economic Surveys which were available at the Government of Kenya website. Correlation statistics were conducted to establish the association between variables. Regression analysis was used to establish the control effect of government revenue on the relationship between government expenditure and economic growth of the Kenya Government. The findings revealed that there was a significant effect of government expenditure on economic growth in Kenya. There was also found to be a strong relationship between government revenue and government expenditure and the control variable which is government revenue revealed a strong influence of government expenditure and government revenue on economic growth. Therefore, the control variable did not water the relationship. However on the joint effect (that is when the two predictor variables were grouped together to predict economic growth) the revealation is that it is only government expenditure which had a significant effect on economic growth since its p-value was less than 0.05 while government revenue did not have a significant effect on economic growth since the p-value was greater than 0.05.The study recommends that for a country to attain economic growth there is need to implement both expenditure and revenue measures by government.

Keywords: Government Expenditure, Government Revenue, Economic Growth, Kenya Government.

Introduction
Many developing countries incur expenditure to increase the growth of the economy. Increasing taxation then becomes necessary to enable these countries to raise sufficient finances to enable these countries to finance their activities. Many countries therefore depend mainly on taxation as a means of generating the required resources to meet their expenditure requirements. These countries will likely find themselves in growing fiscal imbalances when their revenue productivity falls below their expenditures. The efficacy of fiscal adjustment to accomplish fiscal obligations depends on the tax base or capacity relative to the expenditure requirements of the public sector (Chipeta, 1998; Cornia and Stewart, 1991). To achieve high fiscal performance, the various facets of revenue and expenditure estimates must be meticulously systematized and minutely analysed within the general macroeconomic framework. Proper analysis and adequate harmony is necessary to enable revenue and expenditure policies formulated to produce high fiscal performance (Abdul Aziz,Muzafar Shah, 2002; Kusi, 1998; GoK, 2011/2012). Many developing countries are faced with high levels of expenditure while revenue levels are relatively low. Essentially, weak revenue

generation systems have been accused to be contributing to big debt levels. Enactment of revenue eroding measures by the governments and overspending tend to have implications on the amount of public debt to be raised. These governments are therefore forced to raise debt to finance the activities which government cannot afford to finance with the revenue generated using economic resources (IMF & World Bank, 2001 Garba, 1997). The fiscal policy of any government is designed to deliver sound public financing including a commitment to medium-term objectives combined with the flexibility to respond to changing economic conditions in the short-term (Bank for International Settlement, Basel, 1999). Its measurement takes into consideration cyclical movements in the economy such as scaling public debt as a proportion of GDP to provide some insight into cyclical patterns in the economy. GDP is said to react more to monetary policy than fiscal policy and additionally policy moves by monetary authorities take effect faster than fiscal policy action. Some theorists however argue that the reverse is the case (Anderson et. al.,1986; Melecky, 2012).

Many developing countries are rarely able to raise sufficient revenues to enable them finance all their activities. This implies that most of these countries find themselves with huge budget deficits. Buchanan and Wagner (1977) and Gallagher (1994) posits that the rapid increase in government spending is caused by large deficits the argument being that the deficits are there anyway. The hypotheses for taxation and government spending are the tax-spend hypothesis and the spend-tax hypothesis. The tax-spend hypothesis contends that government revenues have a positive effect on government expenditures and conversely, reductions in government revenues reduces government expenditures. The spend-tax hypothesis on the other hand argues that the political system somehow determines how much to spend and then makes the adjustments in tax policy and revenue sources to finance the government spending (Abdul and Muzafar, 2002; Wahid, 2008).

Osoro (1997) observes that low tax collection causes high and persistent deficits and maintains that such high deficits would be eliminated or substantially reduced by designing policies that would raise more tax revenues or improve tax collection. The author observed that government efforts to raise taxes will fail to reduce deficits if they do not go hand in hand with measures to reduce public spending. As countries embark on tax reform programs, they should also put measures in place to tame inflation such that benefits accruing from tax reforms are not eroded by high inflationary pressures while ensuring that government expenditures are kept under control to avoid eroding the benefits derived from increased tax revenue (Farhadian-Lorie and Katz, 1990).

Ordinarily, a country will not benefit significantly from high tax revenues if expenditures of government are not properly managed (GOK, 2011/2012). In a number of countries government's ability to raise revenues or secure financing has been severely restricted by poor economic performance. (Mutambi, 2001; Kusi and Mc Grath, 1998). Saede (1990) observe that in the presence of capital inflows, the overall level of activity in the economy is artificially and temporarily increased through the foreign borrowing, and so is the aggregate tax base. When Governments find themselves running huge budget deficits (Davide, 2016), they might be forced to embark on one or more of the following approaches. Government could opt for discretionary tax measures (DTMS). This option tends to raise tax burden and is usually politically unpopular. Borrowing from the Central Bank fuels inflationary tendencies, whereas borrowing from the public especially through high yielding treasury bills exerts an upward pressure on other interest rates hence impeding private sector borrowing (Siegel, 1979; Saede, 1990).

Many countries undertake tax reforms with the objective of improving the efficiency of tax administration and subsequently increase the amount of tax revenue (Ghura, 1998). Tax reforms are also implemented with the objective of achieving revenue adequacy, economic efficiency, equity and fairness, and simplicity. Administration reforms introduced to address tax administration issues include introduction of a revenue agency such as the Kenya Revenue Authority (KRA) in Kenya or the Uganda Revenue Authority (URA) in Uganda to collect taxes. The agency approach is normally expected to increase the responsiveness of Government to the taxpayer in terms of genuine tax structure demands and reforms and also speedier enforcement on tax defaulters (Chipeta, 1998; Kusi and Mc Grath, 1994).

An assessment of the effect of public debt issuance to finance the key expenditures have persistently exceeded the revenues and both have maintained consistent growth patterns. Prior to the 1973/74 oil crisis, total revenues matched total expenditures. The country started to experience serious budget deficits thereafter calling for external sources of finance (Osei, 1998; Redoblado, 2011; Guinigundo, 2015; Alesina, et. al., 1992; Harding & Pagan, 2002; Davide, 2016).The institutional framework should encompass a legal framework which clarifies the authority to spend, to tax, invest and undertake transactions by government from borrowed funds while organizational framework should be well specified including roles and mandates. Linking the appropriate Government institutions with the institutions charged with the responsibility of managing public expenditure is important to ensure proper management of public spending whether development or recurrent expenditure. To ensure accountability and transparency in expenditure management activities of government should be audited annually by the auditor of government finances or by an external auditor. UNCTAD has assisted countries to come up with a debt management software; the Debt Management Financial and Analysis System (DMFAS) which can be used to manage external and domestic public debt as well as private debt and grants. It can also be integrated into other financial management systems such as expenditure management systems used by government (Rodrigo, 2015). Fiscal and monetary policies are key components mainly used by government in managing the economy. Fiscal policy is applicable to government expenditure while tax revenue is said to influence the country's economy. The two main instruments in fiscal policy are government spending and taxation (Doh-Nani & Awunyo-Vitor, 2012). Therefore, a change in the level and in the composition of taxation as well as government expenditure, influences the aggregate demand and economic activity level together with resource allocation patterns including income distribution. Fiscal policy can also be used to bring the economy to the potential level if policymakers understand the relationship between government expenditure and revenue (Narayan & Narayan, 2006).

Baharumsiiah and Lau (2010) states that budget sustainability refer to the government 's ability to maintain given spending, taxation, and borrowing patterns and to modify policies to satisfy its long run budget constraints. In other words, budget sustainability is the ability of the government to maintain a given policy stance. Thus, government has an important role to play in budget sustainability. Government acquisition of goods and services for current use to directly satisfy individual or collective needs of the members of the community is classified as government final consumption expenditure (Yashobanta & Behera, 2012). Government acquisition of goods and services intended to create future benefits, such as infrastructure investment or research spending, is classed as government investment (gross fixed capital formation) (Takumah, 2014).

In market economies, public corporations should act commercially and whenever possible, should aim at making profit. For that reason, they must have self-sufficiency in management and be given a corporate structure (Aisha & Khatoon, 2010). Thus, their expenditures and revenues cannot be submitted to the same scrutiny and approval mechanisms as the national budget, which should cover only the enterprises' financial transactions with the government and not their transactions with the rest of the economy. According to Comprehensive Public Expenditure Review rReport (2017), world real GDP expanded to 3.7 per cent, which was the highest growth rate since the 2008 global financial crisis. Sub-Saharan Africa growth grew from 1.5 per cent in 2016 to 2.8 per cent in 2017 spurred by improved capital market access, and recovery in the growth of larger commodity exporters such as Angola, Nigeria and South Africa. The East African Community (EAC) region Growth declined from 6.1 per cent in 2015 to stabilize at 5.4 per cent in 2016 and 2017. The Kenyan economy recorded a decline in growth to 4.9 per cent in 2017 from 5.9 per cent in 2016. Among the factors explaining the decline in growth were the slowdown in the growth of the manufacturing sector and the reduction in the share of Kenya's manufactured exports in the regional market.

Government acquisition of goods and services intended to create future benefits, such as infrastructure investment or research spending, is called gross fixed capital formation, or government investment, which usually is the largest part of the government expenditure. Acquisition of goods and services is made through production by the government (using the government's labor force, fixed assets and purchased goods and services for intermediate consumption) or through purchases of goods and services from market producers (Wolde-Rufael, 2008). Government revenue is revenue received by government from government revenue gerating activities. It is an important tool of the fiscal policy of the government and is the opposite factor of government spending. Revenues earned by the government are received from sources such as taxes levied on the incomes and wealth accumulation of individuals and corporations and on the goods and services produced, exported and imported from the country, non-taxable sources such as government-owned corporations' incomes, central bank revenue and capital receipts in the form of external loans and debts from international financial institutions (Lau, Tiong & Ling, 2009).

Keynes (1930) was one of the first economists to advocate government deficit spending as part of the fiscal policy response to an economic contraction. In Keynesian economics, increased government spending is thought to raise aggregate demand and increase consumption, which in turn leads to increased production. Keynesian economists argue that the Great Depression was ended by government spending programs such as the New Deal and military spending during World War II. Classical economists, on the other hand, believe that increased government spending exacerbates an economic contraction by shifting resources from the private sector, which they consider productive, to the public sector, which they consider unproductive. The scope of the budget depends on the field of activities of the government, but must also be in a form to allow government policies to be appropriately scrutinized by the legislature and the public (Kia, 2008).

Tax revenue is the income that is gained by governments through taxation. Just as there are different types of tax, the form in which tax revenue is collected also differs; furthermore, the agency that collects the tax may not be part of central government, but may be an alternative third-party licensed to collect tax which they themselves will use (Ewing, et. al., 2006). The mission of revenue administration is to provide prudent and innovative revenue, investment and risk management and to regulate the use of government capital (Aregbeyen & Insah, 2013). According to Garcia (2012), there are four core responsibilities for the revenue administrator, which are; firstly, to regulate capital expenditures, secondly, to administer tax and revenue programs fairly and efficiently, third, to manage and invest financial assets prudently, and fourth and finally, to manage risk associated with loss of public assets.

In Kenyan context, the Kenya Revenue Authority (KRA) collects vehicle excise duty, which is then passed onto the treasury. The effect of a change in taxation level on total tax revenue depends on the good being investigated, and in particular on its price elasticity of demand. Where goods have a low elasticity of demand (they are price inelastic), an increase in tax or duty will lead to a small decrease in demand not enough to offset the higher tax raised from each unit (Kiminyei, 2018). Comprehensive Public Expenditure Review (2017) report further indicated that lending rates increased from16.99 per cent to 18.3 per cent during the period between 2013 and 2015. However, lending rates declined to 13.69 per cent in 2016 and 13.64 per cent in 2017 respectively, mainly due to interest rate capping that was implemented in September 2016. The capping led to the narrowing of interest rates spread over the review period. Imports as a percentage of GDP averaged 28.4 per cent between 2013 and 2017 while exports as a percentage of GDP averaged 16.5 per cent during the same period. The Kenyan Shilling remained generally stable against most foreign currencies between 2013 and 2017. Relatively lower oil prices, strong remittance inflows, a rebound in tourism and government borrowing in foreign currency continued to support a stable exchange rate with a moderate appreciation of the shilling against the US dollar over the period.

Research Problem

In the field of public finances, the issue of potential links between government revenue and government expenditure has intensely attracted the attention of policy makers (Garcia, 2012). Fiscal policy plays an important part in achieving macroeconomic balance. For instance, in Kenya, the aspect of macroeconomic imbalance and the risk

associated with it come as a result of increase in shares of public expenditure and fiscal deficits in the country's GDP. Such imbalance has existed over the years and has been expanding despite the fact that the Kenyan transition has significantly improved fiscal (tax) system in recent years hence, creating a legal and institutional basis for sound fiscal policies(Ghartey, 2012). Furthermore, the fiscal systems argues that the government should also continue focusing on consolidation of medium-term plans and effective monetary policy to curb domestic demand (Comprehensive Public Expenditure Review, 2017).

Examining the empirical relationship between government expenditures and tax revenues is a crucial step in understanding the future path of the budget deficit and by extension economic growth. Takumah (2014), examined the causal relation between the variables in Ghana (from 1986 – 2012) and the authors results confirmed the existence of fiscal synchronization hypothesis both in the long and in the short run. Yashobanta and Behera (2012), investigated the causal relations between the government revenues and the government expenditures in India (from 1970 – 2008) with VECM model and discovered that the causal relation is bidirectional in the long run. Within the public finance literature, it is often assumed that a government determines both revenues and expenditures in ways that maximize the social welfare of the society. However, the tax-and-spend argument proposes that changes in government revenues lead to changes in government expenditures.

Until now, the empirical evidence on the tax-spend debate has focused almost exclusively on two conventional econometric techniques. Depending on the co-integrating properties between revenues and expenditures, these techniques are based on either variations of the unrestricted vector auto regression (UVAR) or the vector auto regression error correction model (ECM). A necessary condition for the establishment of an effective fiscal policy is to understand and establish appropriate links between government revenues and government expenditures. Therefore, this study seeks to establish the effect of government expenditure on economic growth, the nexus between government expenditure and government revenue, and the control effect of government revenue on the relationship between government expenditure and economic growth.

World Bank (2001) posits that the important ratios to measure government expenditure are total government expenditure to GDP at market prices and that government revenue can be proxied by tax revenue since tax revenue constitutes the highest amount of government revenue in many developing countries. Economic growth is measured using the economic growth rate in percentage terms. The expenditure structure of government which is also an important parameter is measured by dividing total government expenditure by total GDP at market prices to get an indication of the level of government expenditure relative to the size of the bigger government. Many governments seek to support expenditure structures by establishing where feasible, portfolio benchmarks related to the desired development to recurrent expenditure compnents to govern expenditure management (MartinezVazquez & McNab, 2001).

The Kenya Government continuous to incur huge expenditures the theory being that the more that the government spends the higher will be the economic growth of the country. The economic managers need in addition bear in mind the ability of government to raise revenues to finance government spending. What therefore is the level of spending of the Kenya government and what is its effect on economic growth? Is the country able to generate sufficient revenues to finance its expenditures? When government of Kenya spends to influence economic growth while bearing in mind the amount of money government raises through taxation what is their effect on economic growth? Does government revenue influence the ability of government to incur expenditure to influence economic growth? It is thus feasible to establish the control effect of government revenue as proxied by tax revenue on the relationship between government expenditure and economic growth of the Kenya government.

Conceptual Framework

Governments are known to incur expenditures to increase economic activities which are also expected to spur economic growth. Governments tend to increase taxation so that these governments can finance their expenditures. There is an expected positive relationship between government expenditure and economic growth. When then governments impose taxation on its citizens to raise money to finance its expenditures the tax burden is expected to realize economic growth of the economy. The control effect of government revenue proxied by taxation is expected to have a control effect on the relationship between government expenditure and economic growth. However, the expected scenario on economic growth when government spends and they do not tax their citizens should then essentially have implications of government borrowing otherwise where will the government get money to spend from if it does not tax its citizens? Therefore, even when governments spend government needs to spend in such a way as to increase economic growth even without borrowing.

The conceptual model is as follows

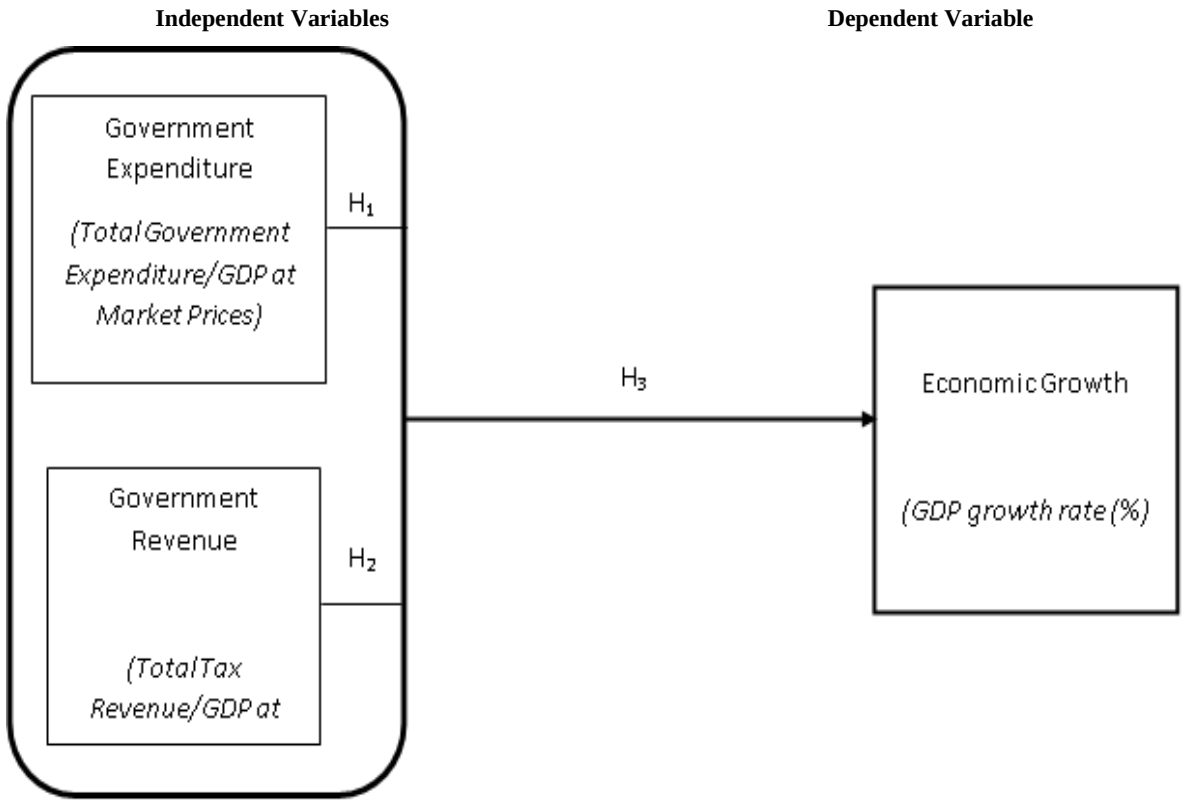

Fig. 1: Conceptual Model**.**

Methodology

The study employed a causal research design to establish the effect of government expenditure on economic growth in Kenya (Brinberg & Joseph, 1985) . A control variable which was government revenue was introduced in the relationship. The period under study ranged from 2002 to 2017 which was considered long enough to enable the researcher to derive conclusions and make recommendations based on the study findings. Government expenditure was measured using total government expenditure to GDP at market prices while economic growth was measured as economic growth in percentage terms as obtained from data published by Natioanal Bureau of Statistics and Economic Surveys. The control variable which in this case was government revenue was proxied by tax revenue and was measured as total tax revenue/GDP at market prices. The study used secondary data which was extracted from the National Bureau of Statistics, and Economic Surveys which were available at the Government of Kenya website. Descriptive statistics was used to test the magnitude of the study variables. Regression analysis was used to establish the effect of government expenditure on economic growth. The regression model was stated as below;

Equation one

$EconGro = \alpha + \beta_1 GovExp_1$

Where EconGro is economic growth, $GovExp_1$ is government expenditure,α is the constant term, and β_1 regression coefficients of predictor variable.

Equation two examined the effect of government revenue on government expenditure which is stated as follows;

$GovExp = \alpha + \beta_1 GovRev_1$

Where GovExp is government expenditure, $GovRev_1$ is government revenue,α is the constant term, and β_1 regression coefficients of predictor variable.

Equation three

$EconGro = \alpha + \beta_1 GovExp_1 + \beta_2 GovRev_2$

Where EconGro is Economic Growth, $GovExp_1$ is government expenditure and $GovRev_2$ is government revenue,α is the constant term, and $\beta_1$and β_2 are the regression coefficients of predictor variables.

Research Findings

The research findings were analyzed through inferential analysis where the study employed use of tests of correlation statistics and regression model to estimate the effect of the causal variables on independent variable (Campell, 2007; Chava and David ,1996;

Descriptive Analysis

Descriptive tests were estimated to establish various measures of central tendencies. Table 1 contains results on the estimates.

Table 1: Descriptive Analysis.

Variables	N	Minimum	Maximum	Mean	Std. Deviation
Economic Growth (GDP)	20	1.50	7.00	3.7550	2.53553
Government Revenue	20	.18	.26	.2235	.11499
Public Expenditure	20	.22	.41	.2640	.14136

Research Data, 2021

The findings have shown that the minimum GDP growth was 1.5% and the maximum being 7%. On the overall, the government of Kenya recorded 3.7% average GDP over a sixteen-year period and a standard deviation of 2.53% from 2002 to 2017. The results as well revealed that the Kenyan government registered minimum government revenue ratio of 0.18 and the maximum government revenue ratio of 0.26.

The results have further indicated that on average, the government had a government revenue ratio of 0.2235 with a standard deviation of 0.11499. The minimum ratio of government expenditure was 0.22 with maximum being 0.41. On average, the ratio of government expenditure within the study period was 0. 264 with a standard deviation of 0.14136.

Correlation Statistics

The study used Pearson correlation method in estimation of the degree of association that existed between the predictor variables and dependent variable. Coefficients of correlated values (*r*) were given and significance level was tested based on *p* – values, using a confidence interval of 95%. Where with the *p* – value ≤ 0.05, the variable was considered significant. The output is as contained in Table 1.

Table 1: Correlation Estimations.

		Government Expenditure	Economic Growth	Taxation
Government Expenditure	Pearson Correlation	1	.649**	.944**
	Sig. (2-tailed)		.000	.000
	N	20	20	20
Economic Growth	Pearson Correlation	.649**	1	.973**
	Sig. (2-tailed)	.000		.000
	N	20	20	20
Taxation	Pearson Correlation	.944**	.243**	1
	Sig. (2-tailed)	.000	.000	
	N	20	20	20

**. Correlation is significant at the 0.01 level (2-tailed).

The study found out that economic growth is statistically associated to an increase in government expenditure given an *r* value of .649 and a significant *p* - value of 0.000. In other words, an increase in the amount spent increases chances of economic growth of the country. Government revenue was also found to have a significant association towards government expenditure as their relationship produced an *r* value of 0.944, *p* – value = 0.000). This can also be interpreted to mean that an increase in the amount of government revenue through taxation is statistically associated with 94.4% increase in the rate of government expenditure which is in line with the tax-spend hypothesis concept. This essentially means that when government generates much revenues through taxation expenditures measures are also put in place to increase government expenditure either as recurrent expenditures, development exependitures or both.

Regression results

Regression analysis was used to analyse the results (Davis, 1985). Three regressions were generated. The first regression was to determine the effect of government expenditure on economic growth, the second regression was to establish the effect of government revenue on government expenditure and the third regression was to determine the joint effect of government expenditure and government revenue on economic growth of Kenya government. The results are discussed in the sections that follow.

The Effect of Government Expenditure on Economic Growth

One of the predictor variable under investigation was government expenditure and thus the study tested its effect on economic growth. The summary of model results produced an *R* value of .833 and an *R* squared of .693 as shown in Table 2. This has an indication that public expenditure is likely to explain economic growth by a margin of 69.3% the remaining percentage can be explained by different variables not included in the model.

Table 2: Government Expenditure and Economic Growth.

Model Summary				
Model	**R**	**R Square**	**Adjusted R Square**	**Std. Error of the Estimate**
1	.833[a]	.693	.676	1.44314
a. Predictors: (Constant), Public Expenditure				

ANOVA[a]						
Model		**Sum of Squares**	**Df**	**Mean Square**	**F**	**Sig.**
1	Regression	84.662	1	84.662	40.651	.000[b]
	Residual	37.488	18	2.083		
	Total	122.149	19			
a. Dependent Variable: Economic Growth (GDP)						
b. Predictors: (Constant), Public Expenditure						

Coefficients[a]							
Model		**Unstandardized Coefficients**		**Standardized Coefficients**	**t**	**Sig.**	**95.0% Confidence Interval for B**
		B	**Std. Error**	**Beta**			**Lower Bound** / **Upper Bound**
1	(Constant)	-.187	.697		-.268	.791	-1.652 / 1.278
	Public Expenditure	14.933	2.342	.833	6.376	.000	10.012 / 19.853

a. Dependent Variable: Economic Growth (GDP)

The analysis of variance findings indicated in Table 2 show a regression sum square value of 84.662 (Mean square = 84.662) and a residual sum square of 37.488 (Mean square = 2.083). The government expenditure and GDP model provided an *F* – value of 40.651 with a significance value (*p* = 0.000). This could imply that we should reject the null hypothesis that public expenditure does not affect economic growth within the Kenyan government significantly since the error we make by doing so is <0.05. The coefficient results for expenditure and GDP shows that economic growth is significantly affected by public expenditure as it gave a coefficient value of 14.933 (*t* = 6.376) supported with a significant *p* value of .0000. In other words, an increase in the economic growth is likely to increase the rate of public expenditure in Kenya. This supports the spend-tax-hypothesis that increasing spending from taxation money is necessary as a vehicle for spurring economic growth.

The Effect of Government Revenue on Government Expenditure

The study tested the effect of taxation on government expenditure and the results are displayed in Table 3. The model summary indicated a correlation *R*-value of 0.944 and an *R* squared value of 0.891. This has indication that taxation was found to have the ability of explaining approximately 89.1 percent of variation in public expenditure.

Table 3: Government Revenue and Government Expenditure.

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.944[a]	.891	.885	.04799

a. Predictors: (Constant), Taxation

ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	.338	1	.338	146.859	.000[b]
	Residual	.041	18	.002		
	Total	.380	19			

a. Dependent Variable: Government Expenditure

b. Predictors: (Constant), Taxation

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	.010	.024		.439	.666	-.039	.060
	Taxation	1.537	.127	.944	12.119	.000	1.271	1.804

a. Dependent Variable: Government Expenditure

The output of ANOVA gave an *F* – value of 146.859 and *p* – value of 0.000. This revelation therefore informs the study to reject the null hypothesis that "Taxation does not have significant influence on government expenditure" since the *p* – value is < 0.05. Based on coefficient results, it can be construed that taxation has a strong relationship towards expenditure of the Kenyan government. This relationship provided a coefficient value of 1.537 (*t* = 12.119) and a strong *p* value of 0.000).

The Joint Effect of Government Revenue and Government Expenditure on Economic Growth

After estimating the effect of individual predictor variables on dependent variable, the study resolved to test the combined effect of both government revenue and government expenditure on economic growth of the country in terms of GDP percentage. The summary results given in Table 4 indicate that the regression model provided a combined correlation *R*-value of 0.841 and an *R* squared value of 0.708. This is indication that the two independent variables (government revenue and government expenditure) were found to explain approximately 70.8 percent of variation in GDP of the country. An indication that there exist other predictor variables not in the model which could be included to improve the model's goodness of fit.

Table 4: Effect of Government Revenue and Government Expenditure on Economic Growth.

Model Summary				
Model	**R**	**R Square**	**Adjusted R Square**	**Std. Error of the Estimate**
1	.751[a]	.528	.723	1.54897

a. Predictors: (Constant), Public Expenditure, Government Revenue

ANOVA[a]

Model		**Sum of Squares**	**Df**	**Mean Square**	**F**	**Sig.**
1	Regression	83.452	2	42.451	22.684	.000[b]
	Residual	33.867	17	2.089		
	Total	127.319	19			

a. Dependent Variable: Economic Growth (GDP)

b. Predictors: (Constant), Public Expenditure, Government Revenue

Coefficients[a]

Model		**Unstandardized Coefficients**		**Standardized Coefficients**	**t**	**Sig.**	**95.0% Confidence Interval for B**	
		B	**Std. Error**	**Beta**			**Lower Bound**	**Upper Bound**
1	(Constant)	-.071	.721		-.086	.962	-1.446	1.523

	Government Revenue	-4.913	7.128	-.518	-.947	.378	-18.629	7.321
	Public Expenditure	22.194	8.067	1.243	2.747	.0140	5.074	39.124

a. Dependent Variable: Economic Growth (GDP)

The output of ANOVA gave a regression sum square of 83.452 and a residual sum square of 33.867 with mean square value of 42.451 for regression and 2.089 for residual. The model provided an *F* – value of 22.684 and a significant value of 0.000. The model therefore informs us that the government revenue and government expenditure as independent variables were acceptable and fit to determine the GDP of the country. This could be an indication that the joint effect of all the predictor variables used in the study is significant in influencing economic growth. Thus, the study rejects the null hypothesis that government revenue and government expenditure together do not significantly influence country's economic growth.

Based on the results on coefficients, it can be construed that despite predictor variables showing some significant relationship towards economic growth in the individual tests, only government expenditure was found to predict GDP significantly when they are grouped together. Public expenditure gave a coefficient value of 22.194 ($t = 2.747$, $p = .0140$). On the other hand, government revenue was found to have a weak relationship towards economic growth as it reported a coefficient value of -4.913 accompanied with a *t* value of .947 and an insignificant *p* value of .378.

Conclusion and Recommendations

The study concludes that government revenue and government expenditure can influence the country's economic growth when tested individually. On the other hand, the study can conclude that government revenue reduces its power when put together with government expenditure on their effect towards economic growth. As the economy of any given country grows, it gives the government the ability to plan for its expenditures. Where countries have weak systems for expenditure management technical assistance for managing the expenditures and putting in place expenditure tracking systems should be implemented and strengthened.

From the study findings effective public expenditure remains an integral part of proper public financial management and overall good governance and it is therefore advisable to prioritize spending of the available resources. Although the joint effect revealed an insignificant effect of government revenue on economic growth it is paramount to ensure that rvenues generated are near sufficient to finance government expenditures so as to reduce the amount that government needs to borrow to finance its expenditures. This study therefore recommends that the government should plan to spend based on its available means of getting funds. Additionally, the government should generate sufficient revenues to reduce the expenditure burden and consolidated financial position of government should be evaluated anually to determine whether public expenditures are in tandem with revenues generated by government. The financial statements should adhere to the requisite disclosure requirements and should be in tandem with the required transparency and accountability in government.

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