

Moderating Effect of Corruption on the Relationship Between Current Expenditure and Sectoral Economic Growth in Kenya

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Abstract

The purpose of this paper was to determine the effect of current expenditure on sectoral economic growth in Kenya as well as the moderating effect of corruption on the relationship. The study covered the period 2006-2015 using Auto Regressive Distributed Lag Model (ARDL) estimation while adopting positivist philosophy and a causal research design. Secondary data from a target of 11 sectors that receive government expenditure was collected from Kenya National Bureau of Statistics, Statistical Abstracts, Kenya National Audit Office reports and Transparency International reports. Hausman Test, Panel Stationarity Test and Heterogeneity Test were conducted as preliminary tests. The study found that current expenditure has a significant effect on sectoral economic growth in the long run and no effect in the short run. The study further found that corruption has a significant moderating effect on the relationship between current expenditure and sectoral economic growth in the long run at the significance level of 0.05. The study concluded that current expenditure has no effect on sectoral economic growth in Kenya in the short run and a negative effect in the long run. As well, corruption has a moderating effect in the long run. The study recommends shrinkage of current expenditure. Additionally, the government should reduce the levels of corruption to accelerate growth through thorough scrutiny of government expenditures and proper control measures be meted.

Keywords: sectoral economic growth, current expenditure, corruption

DOI: 10.7176/DCS/9-5-07

Publication date: May 31st 2019

1.0 Background to the Study

The government essentially performs two functions that is: protection which entails creation of the rule of law and enforcement of property rights: and provision of public goods and services which include roads, education, health and electricity (Economics Online, 2015). Loto (2011) on the other hand postulates that better standards of living to the citizens of a country will be achieved through the development of key sectors of the economy such as health, housing, education and agriculture, as these sectors are important in stimulating the economy of a country by addressing the nation's foremost needs, hence bringing about sustainable development. Indeed, meaningful government expenditure to key sectors of the economy can bring government services closer to the people and can enhance equity and reduce poverty; but the productivity of these allocations depends on the efficiency of resource allocation within these Sectors (Olopade & Olopade, 2010).

The budget theory provides suggestions of increasing allocative efficiency in government by applying the principles of portfolio theory developed by Harry Markowitz in 1950s where budgets are taken as portfolios which should be accepted by their efficiency (Khan & Hildreth, 2002). The dominance notion in portfolio theory is supported by Neo- Classical theory of growth by Solow-Swan (1956) which argues that government should give priority to sectors that enhance capital accumulation, labor, and productivity.

Kenya government expenditure is classified as current and capital expenditure. Current expenditure comprises of compensation to employees and use of goods and services. The proportion of current expenditure reached over 90% between the years 1997 and 2000 due to large expenditure incurred to finance the general election of 1997 and higher salary rewards to teachers and civil servants. Thereafter, it declined reaching below 71 % in the year 2007. The decline was as a result of government re-focusing its expenditure in favor of development, operations, maintenance and reduction of wage related expenditures (Maingi, 2010). The share of recurrent expenditure decreased over the years owing to implementation of budget rationalization program between the year 2005 and 2010. The share of current expenditure to aggregate public spending declined from 89.4% in the financial year 2004/05 to 67.6% in the financial year 2011/2012. This was accompanied by rise in the share of government expenditure allocated to development projects (Wanjiku, 2013). In the financial year 2015/16, current expenditure was estimated to be Ksh.987 billion (Republic of Kenya, 2015a). A summary of current expenditure is illustrated in Figure 1.1.

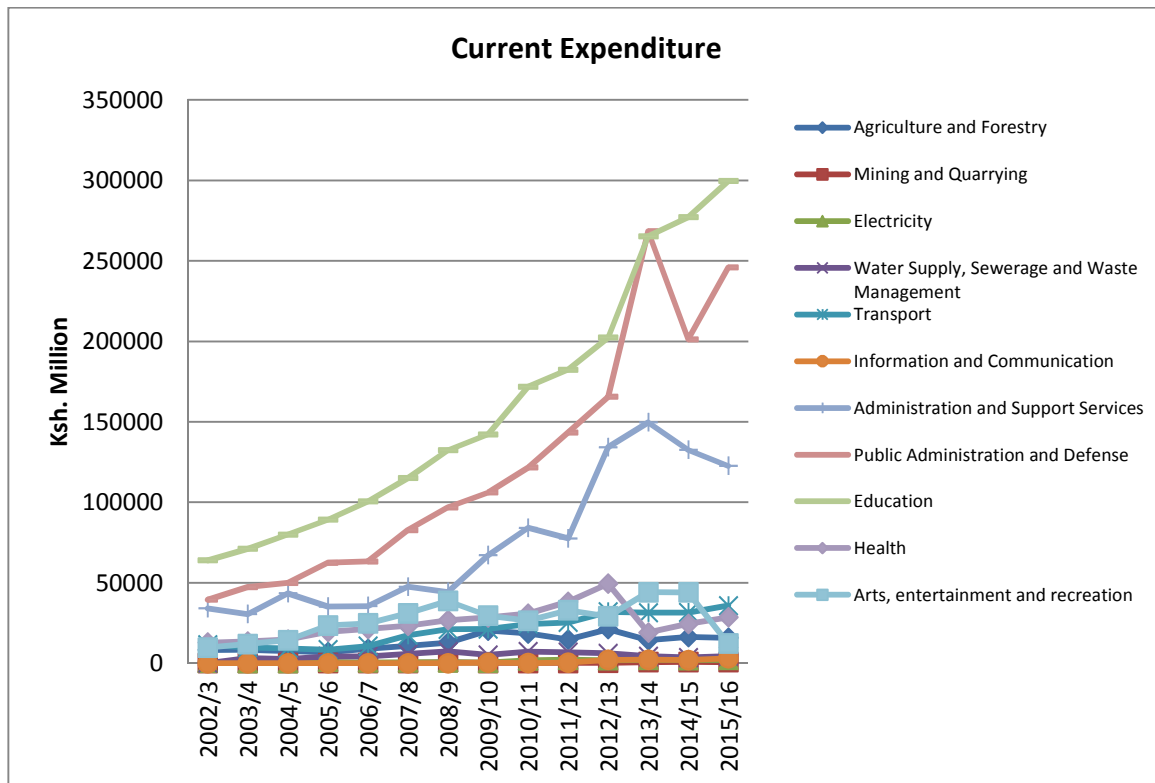


Figure 1.1: Current Expenditure

Source: Various KNBS Statistical Abstracts, Kenya National Audit Reports (2003-2016) and Printed Estimates Financial Year 2015/16.

Education sector takes the largest share of current expenditure from the financial year 2002/3 to 2015/16 followed closely by Public Administration and Defense Sectors and Administration and Support Services Sector. This is because current expenditure is largely composed of salaries and wages for teachers and lectures, disciplined forces and expenditure on operations and maintenance under Administration and Support Services. Infrastructure Sectors, namely, electricity, water supply management and sewerage, ICT and transport take the least share of current expenditure.

Since Kenya's Independence in 1963, sectoral economic growth has been affected by Inefficiencies in government, political instability, drought, poor infrastructure (Maingi, 2010). It is against this poor economic performance that Economic Recovery for Wealth Creation 2003-2007 was propagated (Republic of Kenya, 2003). It was envisaged to create 500,000 jobs annually, 10% aggregate annual GDP growth, reduce poverty levels and maintain inflation rate of 5%. This was to be achieved through focus on productive, Infrastructure and social economic sectors whose growths would contribute to 10% GDP growth (Republic of Kenya, 2003). Consequently, the economy grew by 0.2% in 2002 and 7.1% in the year 2007 (Republic of Kenya, 2009). In the year 2007, Kenya developed an economic blue print that would transform the country into a middle-income economy by the year 2030 with GDP growth prospects of 10% (Republic of Kenya, 2007). To achieve this, government of Kenya should allocate substantial amounts of money to sectors that implement vision 2030 flagship projects. It however remains to be seen whether increase in government expenditure would improve sectoral growth.

1.2 Statement of the Problem

There has been a series of debates among scholars on whether current expenditure promotes economic growth (Lotto, 2011; Ongundipe & Oluwatobi, 2015 and Lagat, 2015). The proponents of neo classical theory argue that expenditure on human capital (salaries and wages) should be enhanced to increase productivity and eventually boost economic growth. On the contrary, IMF in 2017 argued that the proportion of capital expenditure should be higher than current expenditure. In developing countries however, this scenario is beyond reach due to ballooning wage bill, higher levels of unemployment and ever increasing debt serving costs, political risks and economic crimes. The IMF has raised a red flag on the escalatic public wage bill in Kenya contending that increased wage bill increases debt levels and poor infrastructure. Reduced public wage bill creates fiscal space for infrastructure investments that addresses bottlenecks to economic growth (EastAfrican, 2017). On the other hand, Kenya has experienced unrests in health, education, and public administration sectors on demand on

increased compensation rates which will further drive public wagebill up (Republic of Kenya, 2015b).

The Kenyan government has undertaken various budgetary rationalization and reforms aimed at curbing unproductive expenditures, which has been rising over the years (Republic of Kenya, 2013). However, despite the reforms, economic growth has not kept pace with current expenditure growth (Maingi, 2010). Empirical evidences have attempted to investigate how current expenditure affect growth (Nurudeen & Usman, 2010; Ogundipe and Oluwatobi ,2010; and Egbetunde & Fasanya, 2013). From these studies, the effect of current expenditure on economic growth has not been explored exhaustively. This is because studies in Kenya Muthui, Maingi, Gideon, Thuku and Kosimbei (2013), Abdinasir (2013) and Maingi (2010) examined the whole economy on effect of aggregate government expenditure on economic growth omitting other influencers of economic growth such as corruption. Hence, scanty documented information on the effect of current expenditure on sectoral economic growth with corruption moderating the relationship. Lagat (2015) investigated the disparities between Foreign Aid, Government Expenditure and Sectoral GDP growth. However; Lagat (2015) omitted other key sectors in the economy, assumed a direct relationship between current expenditure and sectoral GDP even though there are other influencers of economic growth. It is against this backdrop that this study sought to determine the effect of current expenditure on sectoral economic growth in Kenya with corruption moderating the relationship.

1.3 Objectives of the study

- i. To establish the effect of current expenditure on sectoral economic growth in Kenya.
- ii. To determine the moderating effect of corruption on the relationship between current Expenditure and Sectoral economic growth in Kenya.

2.0 Literature Review

The study is underpinned by the Neo-classical theory, Agency theory, budget theory and stewardship theory.

2.1 Neo-Classical Theory of Growth

This theory was advanced by Solow –Swan in 1956 as an exogenous growth model (Solow-Swan, 1956). It is an economic model of long-run economic growth set within the framework of neoclassical economics. It endeavors to explain long-run economic growth by looking at capital accumulation, labor or population growth, and increases in productivity. If human capital is enhanced, it promotes economic growth. The reasoning behind this is that people with skills are more productive than the unskilled. Government invests in human capital through tertiary level training and on the job training.

Productivity is enhanced by financing or supplying directly the investments that the private Sector would not supply in sufficient quantities due to various market failures like infrastructure projects and basic education and health expenditure, which could directly enhance private Sector productivity; efficient supply of some basic public services that are crucial to provide basic conditions for entrepreneur activity and long-term investment; and financing its own activities in the manner that minimizes distortions to private Sector savings and investment decision and to economic activities more generally (Romer, 1996).

It is on this basis that government expenditure can impact growth by affecting capital and/or labor as well as the generation and/or assimilation of technological progress reflected in total factor productivity (Maingi, 2010). Conversely, since the model assumes that the long-run growth rate is compelled by the population growth and the rate of technical progress, which is viewed to be exogenous, the effect of government expenditure on growth through production factors is considered to be only transitional (Dominick, 2002). The theory is applicable in Kenya in that Sectoral productivity is likely to increase if labor and capital are allocated with sufficient resources. The labor force is captured under current expenditure while capital formation and government investment is captured under capital expenditure.

2.2 Agency Theory

The theory was put forward by Stephen Ross and Barry Mitnick (1973) then later on refined by Jensen and Meckling (1976) after a conflict of interest between categories of agents arose due to the separation of ownership and control (Mitnick, 2012). The theory is an assumption that explains the relationship between principals and agents in business. It is concerned with resolving problems that can exist in agency relationship between principals, such as shareholders, and agents of the principals, such as company executives. The problems that the theory seeks to address are: the problems that arise when the desires or goals of the principal and agent are in conflict, and the principal is unable to verify what the agent is actually doing; and the problems that arise when the principal and agent have different attitudes towards risk. Because of different risk tolerance, the principal and agent may each be inclined to take different actions (Eisenhardt, 1989).

Agent's effort regarding a combination of factors can be positive or negative. The positive ones are efficient and equitable allocation of resources, fiscal transparency measures, and quality of services provided; while the

negative ones are corruption, consumption of perquisites, mismanagement, and nepotism. Cheating rent is interpreted as reduced disutility from “productive” effort, but also as corruption or poor governance (Bouley, Fournel & Leruth, 2002). Chand and Moene (1999) identified factors that contribute to corruption, including the overall level of potential benefits from corrupt behavior, the cost of bribery, including penalties and sanctions, and the bargaining power and extent of discretionary powers of the various actors.

Leruth and Elisabeth (2006) using agency theory approach to public expenditure management systems in developing countries diverted from agency theory in corporate and personal finance to public finance. The first agency problem in public finance arises from the diverging interests of the Ministry of Finance and line Ministries, and the latter’s significant advantage, both on its actions and on the current state of nature. The agent may take unfair advantage of its superior information: if external conditions are favorable, the line ministries could exert little effort and produce a low output, while claiming that this low output is due to unfavorable external conditions. The Ministry of Finance is not in a position to disentangle the two factors unless it uses some form of audit or supervision. In the principal-agent literature, this cheating rent stems from lowering the level of effort vis-à-vis the compensation received. Rents, and possible reductions in public output, compared to what is economically efficient, constitute the agency costs (Leruth & Elisabeth, 2006; Bouley, Fournel & Leruth, 2002; Forrester, 2002).

In the context of Kenya, agency problem is in two facets. First, the principal is the government, viz the National Treasury, while the agent is the line ministries making up sectors. The second agency problem arises from the diverging interests of government and the citizenry. The principal pays taxes and selects the agent to take care of their interest i.e. efficient utilization of their resources and to maximize country’s output. The agent may take advantage of information unknown to the principal to allocate expenditure to unnecessary programs that will have adverse devastating effects to the economy. It can also arise due to abuse of public office for the private benefit that includes poor governance stemming from the abuse of information asymmetry (Forrester, 2002).

To mitigate the agency problems, the National Treasury uses supervision by monitoring input versus result indicators and systematic or random audits (Republic of Kenya, 2016b). In Kenya, supervision is done by the National Assembly, which represents the populace, systematic and random audits by Kenya National Audit Office and Office of the Auditor General. Besides that, various public financial management reforms that include budgeting through programme based budgets that provides for monitoring of input versus output and outcome indicators. Further public participation in expenditure allocation process provides information to the citizenry (Republic of Kenya, 2012).

This theory is thus adjudged to be anchoring all the hypotheses in this study as Government expenditure as allocated by line ministries, who are agents, determines respective sectoral outputs. As such, government expenditure has been hypothesized in the conceptual framework to indicate a positive direct relationship with sectoral growth in Kenya.

2.3 Budget Theory

Valdimer Orlando Key is credited to have put the theory forward in 1940 after he recognized the need to have a budget theory in Public Finance. Key (1940) as cited in Khan and Hildreth (2002) tried to address the issue of Public Budgeting not having a theory by offering a solution that increases the allocative efficiency of government. Budget theory provides a perspective of looking at budgets as portfolios. The argument is that budget requests in the state are very similar to portfolios the finance managers in the private sector deal with on regular basis. The acceptance of these portfolios depends on their efficiency. The theory suggests that government managers would select portfolios that will maximize their utility subject to risk-return combination (Khan, 2002). Every year, the budget managers receive funding requests of activities from MDAs that exceed available resources. It is, therefore, possible to organize these activities into different combinations called portfolios. This notion of budgeting as a decision-making exercise involving multiple packages is consistent with portfolio theory developed by Harry Markowitz in 1950s (Marnix, 2004).

This theory adopts the notion of expected returns, variance co-variance and dominance in allocating funds (Cochrane, 2007). For example, the expected return on expenditure on education Sector would be the greatest number of children that can receive an education. Expected return can be formally defined as the expected return of a portfolio as the weighted average of the expected return of activities it contains. Dominance is a situation where one or more activities in a portfolio dominate others and a decision maker will most likely prefer some activities more than others (Khan, 2002).

Therefore the funds allocated for different activities in a portfolio must reflect the variance as much as possible for those activities. The efficient portfolio will be a combination that would maximize the expected return and minimize the variance (Cochrane, 2007). This theory has limitations that is the application of the theory to all activities, including those that are not divisible and how to deal with a situation when the number of activities facing a budget manager becomes very large (Rubin, 2007). It is possible to allocate resources

efficiently to activities during the MTEF process in Kenya so as to maximize expected returns (Martin, 1997).

2.4 Stewardship Theory

Stewardship theory was put forward by Donaldson and Barney in 1990, and it states that managers left on their own will indeed act as responsible stewards of the resources they control (Donaldson & Davis, 1991). In Public Finance, stewardship refers to public servants responsibility to utilize financial resources in the most economic, efficient and effective way. Stewardship can be theorized by linking it with performance improvement that is resource input requirement, process efficiency, output requirements and outcome requirements, did it end up making a difference? (Jordaan & Fourie, 2013). Therefore, they essentially act like state stewards and work towards fulfilling both economic and political objectives of the state.

According to Liang, Renneboog and Sun (2012), the economic principle requires that MDA's activities achieve growth in state related Sectors and maintain a certain level of monopoly power in some 'National Strategic Industries.' Donaldson and Davis (1991) explain the incentive and punishment structure for civil servants to be based on a political cadre promotion or demotion. The government should regularly rotate its officers and state-appointed managers between political and corporate positions to make sure that they are loyal to the government, which is the party. Indeed, this can minimize the costs aimed at monitoring and controlling behavior. However, to protect their reputation as decision-makers in organizations, public managers are inclined to operate the government organization to maximize financial performance as well as shareholders' profit, that is the needs of citizens (Jordaan & Fourie, 2013).

In the context of Kenya, the executive practices governing style based on the belief that they have the duty to do whatever necessary in national interest unless prohibited by the constitution. Stewardship performance can be linked with efficient utilization of the budget to outputs (sectoral GDP) and outcomes. Examples of such outcomes include increased literacy levels, reduced cost of production, reduced infant mortality rate and the overall growth in the economy that is being anticipated by the Vision 2030.

3.0 Empirical literature

Ogundipe and Oluwatobi (2010) using an econometric analysis based on Johansen technique for the period of 1970-2009 in Nigeria investigated the impact of both government's recurrent and capital expenditure on growth performance. VECM was used for estimation after carrying out unit root and cointegration test. The variables were real growth rate, government spending on administration, economic services, social and community services and transfers. The study established that the component of total expenditure impacts negatively, except on education and health, and insignificantly on growth rate. Long-run equilibrium between components of current expenditure and economic growth may not be attainable. Comparatively, Ekpung (2014) in analysis of public expenditure trends on infrastructure and economic growth in Nigeria between 1970 and 2010 using VECM established that expenditure on infrastructure influences growth. Ogundipe and Oluwatobi (2010) and Ekpung (2014), focused on infrastructure expenditure only as the only component of government expenditure.

Nurudeen and Usman (2010) while focusing on the government expenditure and economic growth established that total recurrent expenditures and government expenditure on education have a negative relationship with economic growth. This study, however, did not split the current expenditure into Sectors. Therefore, current Sectoral expenditure and economic growth could not be established. Moreover, the moderating role of corruption cannot be established.

Olopade and Olopade (2010) examined the impact of government expenditure on economic growth and development in developing countries using Nigeria as a case study. The objective of this study was to; establish the components of government expenditure that augment growth and development, ascertain those that do not, and recommend those that should be reduced. Using regression analysis, the study revealed that recurrent budget has a steady increase and no significant relationship between the majority of the expenditure components, economic growth and development. Estimated result were mixed, in particular, some of the variables were weakly significant as a result of none inclusion of the effect of environmental impacts. This study failed to capture the effect of corruption and openness which the researcher admits that it plays a critical role in Nigeria's economy.

Egbetunde and Fasanya (2013) employed bounds testing (ARDL) approach to cointegration to examine the long run and short run relationship between public expenditure and economic growth in Nigeria using time series data for the period 1970-2010. Results from bound testing indicate that recurrent expenditure has little significant positive impact on growth. Just like other studies, Egbetunde and Fasanya (2013) excluded debt servicing as a component of government expenditure and other factors that moderate the relationship; corruption, inflation and political risk. Egbetunde and Fasanya (2013) suggest that public spending does not stimulate economic growth in Nigerian economy as a result of high recurrent expenditure compared to capital expenditure that is three times of capital expenditure.

Aigheyisi (2013) exploited cointegration and error correction mechanism to investigate the impact of

federal capital and recurrent expenditures on Nigeria’s economy for the period 1980 to 2011. Aigheyisi (2013) established that the short-run impact of current and capital expenditure on GDP was statistically insignificant contemporaneously, but significant with a lag, with recurrent expenditure exerting greater impact than capital expenditure, though the impact of the recurrent was negative while that of the capital was positive. Even though Aigheyisi (2013) recommends checking of transparency and accountability for Nigeria’s economy, the study assumed a direct relationship between federal capital, recurrent expenditures and the economy.

Mauro (1998) used OLS regression to investigate the relationship between corruption and the composition of government expenditure in a cross section of countries. Mauro (1998) established that corruption is found to reduce government spending on education in a cross section of countries. This is because, education stands out as a principally unappealing target for rent-seekers, most probably in large part because its provision typically does not require high-technology inputs to be provided by oligopolistic suppliers (Mauro, 1998). The study employed OLS method to estimate which is inadequate in computing complex macro-economic variables. Besides, other Sectors were excluded and the study was conducted over two decades ago.

Dreher and Herzfeld (2005) reviewed several empirical literatures to investigate economic cost of corruption in Europe and establish how corruption affects economic growth. Cross-section regression was used to estimate the impact of the following variables that were identified in the literature reviewed; investment, inflation and exchange rate, international trade, government expenditure, revenue and shadow economy, education, health and other indicators. Direct and the most indirect effects were combined so as to derive estimates of the overall cost of being more corrupt than the average sample country on economic growth.

The findings of Dreher and Herzfeld (2005) study indicated that corruption reduces expenditures but is marginally insignificant in the system including per capita GDP. The magnitude of the coefficients implies that an increase in corruption by one point reduces expenditures between 1.3 and three percentage points. When estimated as part of the system including economic growth, an increase in the corruption index by one point reduces the inflation rate by about 45 percentage points. The cross section analysis used cannot give us more time to establish the long-term economic cost of corruption. Besides the methodology used that is, the review of existing literature has weaknesses that include not being sufficiently critical, not discriminating between relevant and irrelevant materials, exclusion of landmark studies and relying on material that is likely to be out-of-date. Further, the context is out of Africa, and the results might not be generalized in the case of Kenya.

Musyoka (2013) employed the Engle and Granger two steps co-integration test, Granger causality test and time-series aggregated data from the year 1995-2011 to examine effects of corruption on economic growth in Kenya. ECM was used to estimate the equation. The control variables used were pupil/teacher ratio (a proxy for quality of human capita), secondary school enrollment rate (a proxy for the quantity of human capita) the share of the government consumption, gross domestic investment ratio. The tests by Musyoka (2013) revealed that there is bi-directional Granger causality from corruption to public investment and vice versa. They also revealed that the relationship between corruption perception index and GDP growth rate shows a coefficient that is negative and insignificant in the short run but positive and significant in the long run at 1% level. The findings support the view that corruption hampers growth, and call for reforms to improve the quality of governance as a prerequisite for achieving sustained growth (Musyoka, 2013). The study cannot detail the effects of corruption on specific components of government expenditure that is current expenditure, capital expenditure, debt servicing.

Jajkowicz and Drobiszová (2015) used pooled panel dataset for 21 Organizations for Economic Co-operation and Development (OECD) countries between 1998 and 2011 to test the effect of corruption on allocation of government expenditure. The findings of Jajkowicz and Drobiszová (2015) indicate that government expenditure on defense and general public services increase, while government expenditures on education, health, recreation, culture and religion decline with higher levels of corruption. This study however focused on effect of corruption on allocation of government expenditure and therefore the effect on Sectoral economic growth cannot be established.

4.0 Conceptual Framework

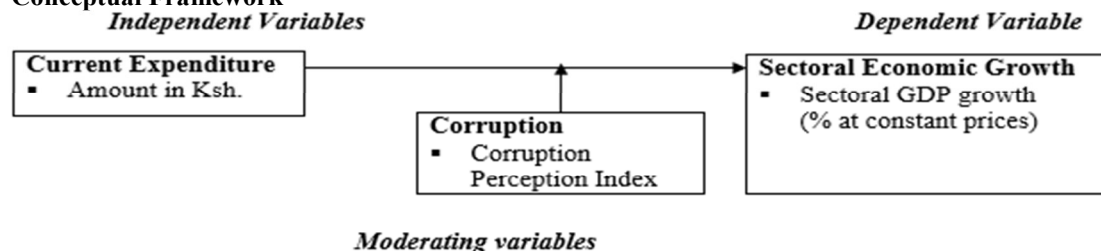


Figure 2.2: Conceptual Framework
 Source: Researcher (2015)

5.0 Research Methodology

Due to the significant roles that these sectors have on the economy and the quantum of expenditure expended by government, Agriculture and Forestry, Mining and Quarrying, Electricity, Water Supply, Sewerage and Waste Management, Transport, Information and Communication, Public Administration and Defense, Education, Health, Administration & Support Services and Arts, Culture & Recreation Sectors were selected for the study. An Autoregressive Distributed Lag (ARDL) model developed by Pesaran *et al.* (2009) was employed because unlike Westerlund (2007), ARDL model is consistent even if there is a mixture of $I(0)$ and $I(1)$, it estimates the functional Error Correction Model (ECM) and tests for cointegration at the same time. Given the nature of the study problem herein, it was suggested that this study takes a positivist philosophy and a causal research design. To choose an efficient estimator among the three possible estimators (MG, PMG and DFE) of the Pesaran *et al.* (2009) for models 3.1 through 3.3, Hausman test was used. Panel Stationarity, Hausman test and Hetregoniety test to check whether sectors are unique were conducted before applying the ARDL Model.

The model

$$\ln SG_{it} = \beta_0 + \beta_1 \ln CE_{it} + \mu_i + u_{it} \dots\dots\dots 3.1$$

where

SG=Sectoral economic Growth

ln = The natural logarithms operator

μ_i =Individual Sectoral effect

u_{it} =Is idiosyncratic error term

β_0 =Is a constant

β_i 's =Are coefficients

CE =current expenditure

Introducing Corruption as a variable

$$\ln SG_{it} = \beta_0 + \beta_1 \ln CE_{it} + \beta_4 \ln COR_t + \mu_i + u_{it} \dots\dots\dots 3.2$$

Where COR_t is corruption in year t

Corruption as a moderator

$$\ln SG_{it} = \beta_0 + \beta_1 \ln CE_{it} + \beta_4 \ln COR_t + \beta_5 \ln COR_t * \ln CE_{it} + \mu_i + u_{it} \dots\dots\dots 3.3$$

Table 1.1: Moderation Decision Making Criteria

Scenario	Model 3.2	Model 3.3	Conclusion
One	β_4 is significant	β_5 is insignificant	Moderating variable is an explanatory variable
Two	β_4 is insignificant	β_5 are significant	Moderating variable has a moderating effect

Source: Whisman and McClelland (2005)

Table 1.1 above illustrates the two possible scenarios that can occur when corruption is introduced as a variable as well as a moderator. If scenario one occurs then corruption is an explanatory variable rather than a moderator. If scenario two occurs then corruption is a moderator.

6.0 Results, Findings and Discussion

Table 1.2: Effects of Current expenditure on Sectoral Economic Growth

Variables	PMG		MG		DFE	
	Long Run	Short Run	Long Run	Short Run	Long Run	Short Run
Current Expenditure	-0.204*** (0.0394)	-0.545 (0.431)	-1.474*** (0.529)	-0.0495 (0.296)	-1.822*** (0.175)	-1.112** (0.482)
Constant		0.934*** (0.324)		13.46*** (4.557)		21.14*** (2.533)
SPEED OF ADJUSTMENT						
	-0.307*** (0.0951)		-0.984*** (0.167)		-1.189*** (0.102)	
KEY:	Standard Errors In Parentheses					
	*** P<0.01, ** P<0.05, * P<0.1					

Source: Research Data (2016)

According to the efficient Pooled Mean Group (PMG) estimates, Table 1.2 above indicates that the coefficient of current expenditures in the short run is -0.545 with a p-value greater than the significance level of 0.05 and t statistic of -1.26 that is, $(-0.545 / 0.431 = -1.26)$. Hence, the null hypothesis that current expenditure has no effect on Sectoral economic growth in Kenya was supported. Thus, growth in current expenditures has no effect on Sectoral economic growth in the short run. However, in the long run the coefficient of current expenditures is -0.204 with a corresponding p-value less than the significant level of 0.01 and t Statistic of -5.18 that is, $(-0.204 / 0.0394) = -5.18$. Consequently, the null hypothesis that current expenditure has no effect on Sectoral economic growth is rejected in the long run. Since Sectoral growth and current expenditures enter model 3.1 in log form, the magnitude of the coefficient has elasticity. Elasticity is a measurement of how responsive an economic variable is to a change in another (Mukras, 1986). Thus a one per cent increase in a Sectors current expenditure decreases the Sectors growth by 20.4 percentage points holding other factors constant.

This finding is consistent with empirical findings by Lagat (2015), Nurudeen and Usman (2010) and Olopade and Olopade (2010). The negative effect could be attributed to long gestation period by Sectors like Education which is the largest beneficiary of current expenditure (Abdinasir, 2013; Maingi, 2010). Besides, a developing country like Kenya is a net importer of medicare which affects the economy negatively (Muthui *et al.*, 2013). Loto (2011) contends that positive growth can be achieved in the long run if brain drain is checked. This finding could also be attribute to wasteful spending on operations and maintenance and not limited to expenditure on foreign and domestic travels, hospitality and inefficiencies by the workforce in government or a bloated public wage bill.

Table 1.3: Corruption as a Variable

VARIABLES	PMG		MG		DFE	
	Long run	Short run	Long run	Short Run	Long run	Short Run
Current Expenditure	-0.117*** (0.0118)	0.0455 (0.0641)	-0.0893 (0.0954)	0.0689 (0.0446)	-0.0262 (0.0277)	-0.0199 (0.0183)
Corruption	-0.0973 (0.0816)	0.0587 (0.0369)	0.00284 (0.162)	0.0519 (0.100)	-0.0592 (0.126)	-0.133* (0.0690)
Constant		2.016*** (0.719)		4.076 (3.582)		3.340* (1.835)
SPEED OF ADJUSTMENT						
Model	-0.515*** (0.156)		-0.830*** (0.119)		-0.591*** (0.0700)	
KEY:	Standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1					

Source: Research Data (2016)

The coefficient of interest in Table 1.3 is that of corruption. The PMG estimates for the coefficient is -0.0973 with a corresponding p-value greater than the significance level of 0.05 and t statistic of -1.19 that is, $(0.0973 / 0.0816) = 1.19$. Model 3.3 estimates were interpreted concurrently with those of model 3.4.

Table 1.3: Corruption as a Moderator

VARIABLES	PMG		MG		DFE	
	Long run	Short run	Long Run	Short Run	Long Run	Short Run
Current Expenditure	-0.323*** (0.124)	0.273 (0.450)	-3.312 (2.385)	1.617** (0.754)	0.115 (0.233)	-0.0903 (0.109)
Corruption	1.85e-05*** (5.62e-06)	1.103 (1.943)	-0.0207 (0.0206)	6.859 (4.845)	-1.36e-05 (3.03e-05)	1.628 (1.101)
Corruption*Current Expenditure	-0.299*** (0.0605)	-0.000483 (0.00150)	-0.853 (0.749)	0.00318 (0.00267)	-0.131 (0.127)	8.79e-06 (1.87e-05)
Constant		-10.49*** (3.427)		12.40 (55.43)		-2.011 (10.03)
SPEED OF ADJUSTMENT						
Model	-0.484*** (0.169)		-1.225*** (0.230)		-0.473*** (0.0697)	
KEY:	Standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1					

Source: Research Data (2016)

Table 1.3 above indicates the introduction of corruption as a moderator. The coefficients of interest are those of the interaction terms. The PMG estimate indicates that in the long run, the coefficients of all the interaction terms; current expenditure, is significant. In Table 1.2, the coefficient of corruption is not significant at the level of significance of 0.05 with a t statistic of 1.09. When these scenarios are compared to the decision making criteria in Table 1.1, the null hypothesis (that corruption has no moderating effect on the relationship between government expenditure and Sectoral economic growth in Kenya) is hereby rejected considering the level of significance of 0.05 in the long run for all the three variables. Consequently, in the long run, corruption has a moderating effect on the relationship between (current expenditure, capital expenditure & debt servicing) and Sectoral economic growth.

The sign (+ or -) of the coefficient of the interaction terms and the coefficient of the respective variables are the same for current expenditures in the long run. Therefore in the long run, corruption enhances the effect of current expenditure on sectoral economic growth.

In the short run, the coefficients of all the interaction terms for current expenditure, in Table 1.3 is not statistically significant. In Table 1.2 the coefficient of corruption is as well insignificant with a p-value greater than the significance level of 0.05 and t statistic of 1.59 calculated as $(0.0587 / 0.0369) = 1.59$. These scenarios do not coincide with any of the two possible scenarios in the decision making criteria. Therefore, the null hypothesis (that corruption has no moderating effect in the relationship between current expenditure and sectoral economic growth in Kenya) is not rejected in the short run. Hence, in the short run corruption neither explains nor moderates the relationship between current expenditure and Sectoral economic growth in Kenya.

This is contrary to the empirical findings of Dreher and Herzfeld (2005) which documented that corruption reduces expenditure and has no significant effect on GDP. In the short run, corruption neither explains nor moderates the relationship between government expenditure and sectoral economic growth. Musyoka (2013) established a bi-directional causality from corruption to public investments and a negative long run relationship between corruption and economic growth in Kenya.

7.0 Conclusion

The results from PMG estimator indicate that current expenditure has no effect on sectoral economic growth in the short run and a negative effect in the long run. This is inconsistent with Neo-Classical theory of growth, which highlights that productivity increases if the workforce is enhanced. Current expenditure is largely composed of salaries and wages for government employees. Above and beyond, budget theory advocates for prioritization of activities to be funded by government so as to maximize expected return, which in this case is Sectoral GDP growth. The finding therefore contradicts the budget theory.

Empirical findings point out that corruption has a moderating effect on the relationship between current expenditure and sectoral economic growth. Moreover, the study findings further indicate that corruption enhances the effect of current expenditure. This finding supports stewardship theory that requires government officers to be good stewards and utilize public financial resources in the most economic, efficient and effective way inclined to maximize Sectoral output.

Current expenditure has no significant effect on sectoral economic growth in the short run. However, in the long run, current expenditure has an effect on sectoral economic growth with a negative coefficient. This finding is consistent with other empirical studies. Hence, the study concludes that, current expenditure has a negative effect on sectoral economic growth in Kenya in the long run.

Empirical findings indicate that corruption has a moderating effect on the relationship between current expenditure and sectoral economic growth in Kenya. Current expenditure was found to have a positive coefficient. This study concludes that corruption has a moderating effect on the relationship between current expenditure and sectoral economic growth in Kenya. Moreover, it is concluded that corruption augments the effect of current expenditure in the long run. However, it is neither a predictor nor moderator in the short run.

8.0 Recommendations

Several policy recommendations can be derived from these research findings. National Treasury and MDAs should reduce current expenditure since it is growth retarding. This can be achieved through establishment of optimum workforce and streamlining the human resource policies in the public Sector. This will eliminate inefficient work force and bloated public wage bill. Besides that, the National Treasury should continue rationalizing expenditures on operations and maintenance including hospitality, domestic and foreign travel.

The National Treasury should embrace deeper public participation not only because it is a legal requirement, but it increases accountability and transparency. It must therefore devise an engagement framework that ensures that the process is open to large numbers of stakeholders whose input is required to guide decision-making. Since corruption moderates the relationship current government expenditure and sectoral economic growth in the long run, the executive, judicial and legislative arms of government should reduce levels of corruption to accelerate growth. This could be achieved through thorough scrutiny of all government expenditures and

prosecution of government official who are found guilty of corruption.

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