

**DETERMINANTS OF BUDGETARY ALLOCATION IN THE PUBLIC
SECTOR: A CASE OF GOVERNMENT MINISTRIES**

NASHON OSORE

REG. NO.: D63/5681/2017

**A RESEARCH PROJECT PROPOSAL SUBMITTED TO THE SCHOOL OF
BUSINESS IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE
AWARD OF THE DEGREE OF MASTER OF SCIENCE IN FINANCE
UNIVERSITY OF NAIROBI**

OCTOBER, 2019

DECLARATION

This research project is my original work and has not been presented for a degree or other award in any university.

Signature Date

Nashon Ochieng Osore

D63/5681/2017

This research project has been submitted for examination with my approval as the university supervisor.

Signature Date

James Karanja

Lecturer, Department of Finance and Accounting

School of Business, University of Nairobi

ACKNOWLEDGEMENT

I thank God for his guidance and grace that has helped me complete this paper successfully. I extend my sincere thanks to my supervisor together with my moderator for their support, patience, great advice and objective criticisms which enabled me to come this far. I would like also finally to thank my family and friends who were always willing to help and guide when I needed. My research would not have been possible without them.

DEDICATION

This project is dedicated to my family for the love, patience and faith they had in me throughout the study period and the entire course. I also dedicate this research project to my friends who have supported me throughout the process

TABLE OF CONTENTS

DECLARATION.....	ii
ACKNOWLEDGEMENT.....	iii
DEDICATION.....	iv
TABLE OF CONTENTS	v
LIST OF TABLES	viii
LIST OF FIGURES	ix
CHAPTER ONE: INTRODUCTION.....	1
1.1 Background of the Study	1
1.1.1 Budgetary Allocation.....	3
1.1.2 Determinants of Budgetary Allocation	4
1.1.3 Budgetary Allocation and its Determinants.....	5
1.1.3 Government Ministries in Kenya.....	6
1.2 Research Problem	8
1.3 Research Objective	10
1.4 Value of Study	11
CHAPTER TWO: LITERATURE REVIEW.....	13
2.1 Introduction.....	13
2.2 Theoretical Review	13
2.2.1 Agency Theory.....	13
2.2.2 Allocation of Resources Theory	13

2.2.3 The Budgeting Theory	14
2.3 Determinant of Budgetary Allocation.....	16
2.3.1 Expenditures	17
2.3.2 Public Revenue	18
2.3.3 Program Based Budgeting	19
2.3.4 Foreign Aid	20
2.4 Empirical Review.....	22
2.5 Conceptual Framework.....	24
CHAPTER THREE: RESEARCH METHODOLOGY	26
3.1 Introduction.....	26
3.2 Research Design.....	26
3.3 Target Population.....	26
3.4 Data Collection	27
3.5 Diagnostic Tests.....	27
3.6 Data Analysis	28
3.6.1 Analytical Model	28
3.6.2 Test of Significance	29
CHAPTER FOUR: DATA ANALYSIS AND PRESENTATION.....	30
4.1 Introduction.....	30
4.2 Descriptive Statistics.....	30
4.3 Diagnostic Tests.....	31
4.3.1 Tests of Normality	32

4.3.2 Test for Multi-collinearity.....	33
4.3.3 Heteroscedasticity	34
4.4 Inferential Statistics	35
4.4.1 Correlation Analysis	36
4.4.2 Regression Analysis.....	37
4.5 Discussion of Findings.....	40
CHAPTER FIVE : SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS.....	42
5.1 Introduction.....	42
5.2 Summary of Findings.....	42
5.3 Conclusion	43
5.4 Recommendations.....	43
5.5 Limitation of the Study	44
5.6 Suggestions for Future Research	44
REFERENCES.....	45
Appendix I: Government Ministries Established in Kenya.....	49
Appendix II: Raw Data	51

LIST OF TABLES

Table 4.1: Descriptive Statistics	31
Table 4.2: Shapiro-Wilk Test of Normality	32
Table 4.3: Coefficients ^a	33
Table 4.4: Test for Heteroscedasticity	35
Table 4.5: Correlation Analysis	36
Table 4.6: Model Summary	38
Table 4.7: ANOVA ^a	38
Table 4.8: Coefficients.....	39

LIST OF FIGURES

Figure 2.1: Conceptual Framework	25
--	----

CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

The increasing complexity of the public administration environment and the continuous need to align the needs of society with limited resources require that funds are made available for a specific purpose and used for that purpose. Government institutions all rely on the citizens of the country for their income and are therefore subject to relevant public-sector legislative and administrative processes in dealing with revenue and expenditure. Internationally, poor performance of governments has a common origin, namely weak government spending practices and accountability requires adequate capacities for managing public finances (Aregbeyen & Baba, 2013). The aim of budget allocations in the public sector is to manage limited financial resources to ensure economy and efficiency in the delivery of outputs required to achieve desired outcomes that will serve the needs of the community. A sound budget allocation allows government to make the best use of all available resources, including international development assistance, to improve the quality of life of society. This includes managing expenditure and raising revenue and is not merely an issue of spending more, but of maximising the impact of public resources (Bhatia, 2013; Chang, 2015).

This study will be anchored on institutional theory, agency theory, allocation of resources theory and the budgeting theory. The perspective of agency theory in the budgeting allocation of government ministries in essence sees how the principal; the national treasury and the public service commission of Kenya (PSC) allocates budgets to various

ministries as the agents that undertake the specific duties assigned. The National Treasury is responsible for allocating budgetary decisions to the agencies while the PSC is in charge of monitoring and evaluating the performance of public institutions from time-to-time. (Von Hagen, 2002). The ministries should represent the interests of the people in budget allocation (Groehendijk, 1997). The Allocation of resource theory developed by Peteraf and Barney (2003) assist national treasury and the public service commission distributes financial resources through budgeting process to attain financial goals (Zipporah, 2017). This theory explains how ministries take time to understand the variety of needs and availability of resources and allocate the limited resources to various departments and programs to enable service delivery. According to the Theory of Budgeting, budgets provide mechanisms for tracking in consistencies between set organizational objectives and actual performance which is a vital process for effective budgetary performance (Shields and Young, 1993).

Financial stability is important for public institutions and according to Anderson (2011) it ranges from enabling an organization to have sufficient resource for quality service delivery, maximizing the potential of service delivery, enhancing the ability to pay staff, vendors and creditors on time and maintenance of good credit risk. Fiscal measures embodied in financial planning enable government by means of its aggregate expenditures and taxation to influence and shape incomes, production and employment in desired directions (Rahaman, 2010). Silva and Jayamaha (2012), contended that governments can, and often do use a well-coordinated revenue, expenditure and debt programs to influence not only the national economy but also to stimulate development

This makes budgeting allocation an important area of concern that has attracted the attention of researchers, organizational managers, government and the public at large.

Budgetary allocation is used by most organizations as a tool for proper management of resources in the organization and its activities. An organization with well formulated budgetary allocation easily assigns its managers the responsibility for the use of designated financial resources to achieve their assigned operational objectives, (Owili, 2010). Budget allocation provides comparisons of actual results against budget plan. Departures from budget can then be investigated and the reasons for the differences can be divided into controllable and non-controllable factors, this is essential in reducing inefficiencies and poor budget practices leading to efficient allocation of scarce resources (Kanyinga, 2014). In Kenya's government ministries, budget accomplishment is far from reality and the disparity between budget and accomplishment are so wide and kept on abating as years pass by and thus this study is motivated to establish the determinants of budgetary allocations among government ministries

1.1.1 Budgetary Allocation

Although there is a consensus on generic stages of a budget cycle, a review of the literature on public financial management reform shows that there is no universally agreed definition of budget allocation (Pretorius, 2015). The narrowest definition confines budget allocation to the downstream activities of budget execution, control, accounting, reporting, monitoring and evaluation (Allen, Schiavo-Campo & Garrity, 2014). As an alternative definition, Rosen (2013) describes budget allocation as the

taxing, spending and debt management of government, which influences resource allocation and income distribution.

A strong budget allocation system is critically important in achieving the strategic goals and objectives of government and requires a series of realistic steps or platforms to accommodate multiple role players and to manage relationships. Each platform is defined in terms of improved outcomes and is the basis for launching the next stage. The spending portion covers the budget cycle, including budget preparation, internal controls, accounting, internal and external audit, procurement, and monitoring and reporting arrangements (Witt & Müller, 2014)

The budget allocation system highlights the relationships of various role players in the different components, which create the opportunity for good governance with the emphasis on public financial management capacity, accountability and responsiveness (World Bank Report, 2008). The system provides for collective decision-making, for citizens to express their preferences and accountability. The budget allocation system makes provision for aggregate fiscal discipline, strategic prioritization in composition of expenditure with the budget as a key instrument to implement government policies, operational efficiency in use of resources and fiscal transparency.

1.1.2 Determinants of Budgetary Allocation

Budget allocation process is to ensure the fulfilment of the financial and economic aspects of the budget. The financial tasks include; spending the amounts for the purposes

specified, minimizing savings and avoiding lapses or rush of expenditures during the end of the year. The economic tasks on the other hand are; ensuring that the physical targets of programmes and projects are achieved and the macro-economic aspects of the budget such as borrowing and deficit levels are also achieved. In managing budget allocation one of the key areas of focus is the government spending pattern (Nyamongo et al., 2007)

Two key factors influence budgeting allocation process for government spending namely, the level of local revenues collected and the availability of external resources to bridge the gap occasioned by shortfall in revenues. When revenues fall short of the projected level then budget implementation is affected to the extent that the expenditures have to be reduced and some projects and programmes postponed altogether. External resources in the form of loans and grants are also factored into the budget following commitment by donors. The funds may however not be available at all as may be released late into the financial year as the budgeted amount may be reduced or a result of some donor refusing to release funds as result of the non-fulfilment of donor conditions (Pollitt & Bouckaert, 2004).

1.1.3 Budgetary Allocation and its Determinants

Budgetary Allocation is a very significant tool of economic management and political governance. It constitutes the framework for providing various goods and services by government. It is an annual financial and economic plan which serves as a vehicle for mobilization, allocation and management of resources. Annual budget is an important instrument of power and governance and more importantly a means for government to

achieve the economic, social and political objectives of the country. For this to happen, the budget must be well formulated and effectively implemented (Obadan, 2016).

In recent times, though, budget allocations have also been utilized to support such important management functions as communicating and determining corporate goals and objectives, allocating resources and appraising performance functions for which the budgetary control system was never designed, and for which it is not at all well suited (Bunce and Fraser, 1997). It is perhaps not surprising then that the traditional budgeting system is considered to be “out of sync” with the needs of organisations in the information age and that a new approach to budget allocation to achieving management’s purposes for budgeting is needed (Hope and Hope, 1997)

1.1.3 Government Ministries in Kenya

A government is a political system by which a people or a country is administered and its affairs regulated. According to the Constitution of Kenya (2010), GoK comprises three arms, thus executive, legislature and judiciary. The executive, which is the largest arm, has the responsibility of implementing laws enacted by the legislature while judiciary arbitrates on legal disputes that arise. The executive is organized into 21 ministries that are assigned mandates in specialized sectors to serve and deliver service to the public, (GoK, 2016).

A government ministry is an organization that is charged with the responsibility for government administration. It is headed by a cabinet secretary who has the authority over one or more departments. The ministries are under the cabinet and hence coordinate

government functions and activities (Republic of Kenya, 2012). Cabinet secretaries are have the sole mandate of formulating the policy and government conduct; they are individually responsible for the administration of their department. Their functions are to advise the president on the central matters of public policy and specific issues about their respective ministries. The cabinet secretaries discuss policy issues that affect the management of the government. The cabinet secretaries are in charge of the ministries; they give direction and control for which they are individually responsible to the National Assembly. The cabinet secretary being the head of the ministry is accountable to parliament for his department irregularities, and his designation is independent of the entire cabinet (Republic of Kenya, 2012).

The budget development and execution processes are transparent, orderly and predictable. Ministers and Ministries have greater budgetary flexibility (devolution) - but within a hard budget constraint. Managers at all levels (that is, within spending Ministries) have a clear budget allocation, know what it is intended for and know what results are expected. The Government Ministries were initially using the zero based budgeting which involved every function within an organization being analyzed for its needs and costs from the zero-base, then incremental budgeting was adopted in which no reference is made to the previous level of expenditure and is currently in the process of adopting performance based budgeting which is a way to allocate resources to achieve specific objectives based on program goals and measured results (Republic of Kenya, 2017). The Ministries are responsible for developing and maintaining sound fiscal and monetary policies that facilitate socio-economic development in all the government

subsectors. The government Ministries coordinates government departments in the preparation of the annual national budget. It is the responsibility of the Ministry to initiate and guide all departments to prepare their ministerial budgets.

1.2 Research Problem

The aim of budget allocations in the public sector is to manage limited financial resources to ensure economy and efficiency in the delivery of outputs required to achieve desired outcomes that will serve the needs of the community. A sound budget allocation allows government to make the best use of all available resources, including international development assistance, to improve the quality of life of society. This includes managing expenditure and raising revenue and is not merely an issue of spending more, but of maximizing the impact of public resources (Chang, 2016)

The decision as to how to allocate limited financial and non-financial resources, in an effective and efficient manner, is a significant function in all ministries in Kenya and this undertaking will be nearly impossible without budgeting. Without proper budget scrutiny and feedback about budgetary problems, many establishments would become insolvent. Some of the problems arise from inadequate data to formulate and implement a proper budget; and non-existence of well-defined structure, which leads to overlapping of duties. Budgeting is a very critical process in almost every entity in the realization of strategic organizational goals (Suberu, 2010). A budget is a means of translating the aim and overall objectives of an organization so as to get packages of actions and sources to be determined and uses finance so as performance evaluation can be allowed by the people

who are entrusted with the resources (Babalola, 2008). According to Adongo (2013) Kenya has introduced budgetary reforms in the public sector which aim at maximizing the positive output that accrue from spending through budget. It is from unsatisfactory performance against budgetary provisions that these reforms have been brought about.

Budgetary allocation is used by most organizations as a tool for proper management of resources in the organization and its activities. An organization with well formulated budgetary allocation easily assigns its managers the responsibility for the use of designated financial resources to achieve their assigned operational objectives, (Owili, 2010). Budget allocation provides comparisons of actual results against budget plan. Departures from budget can then be investigated and the reasons for the differences can be divided into controllable and non-controllable factors, this is essential in reducing inefficiencies and poor budget practices leading to efficient allocation of scarce resources (Kanyinga, 2014). In Kenya's government ministries, budget accomplishment is far from reality and the disparity between budget and accomplishment are so wide and kept on abating as years pass by

After the ratification of the Constitution of Kenya in 2010, there has been constant pressure towards the government ministries to improve their performance and service delivery. Fiscal reforms emphasized on performance measurements that directly link budgetary allocations to specific performance goals. The adoption of the program-based budget facilitated the budgeting practices to guide public managers to monitor the implementation of resource allocations and demonstrate their effectiveness in terms of

program's outputs and outcomes. The new reforms further expanded the scope of public scrutiny by emphasizing citizens' participation in Articles 10 and 232 of the constitution (Republic of Kenya, 2010). Due to wider participation, citizens are now developing an interest in learning the achievements their governments have attained at the end of the fiscal year. Thus, public managers must demonstrate resource utilization in line with their performance outputs and outcomes.

Qi (2010) on the budgeting process on the performance of SMEs in China established that formal budgeting process positively affects a firm's performance. A study on the relationship between budgeting and performance of Remittance companies in Somalia by Mohammed and Ali (2013) concluded that there existed a significant statistically relationship between the budgeting process and the firm performance. In Kenya Nyageng'o (2014) revealed that budgetary control done effectively improves performance of devolved government. Nkanata (2012) studied on the factors affecting the government spending on the budget allocations by accounting officers, a case of Ministry of Education, while Kiriimi (2012) studied on the factors affecting budget utilization by government ministries in Kenya. To the best knowledge of the researcher, there is no study which have been done with regards to the determinants of budgeting allocation among government ministries. Therefore, the study sought to answer the question; to what are the determinants of budgeting allocation among government ministries?

1.3 Research Objective

To examine the determinants of budgeting allocation among government ministries.

1.4 Value of Study

This study may benefit the stakeholders who participate in budgeting process at ministries in that it may assist in identifying where the process goes wrong. Officials entrusted to prepare the ministry budgets will get to know what causes the variances in budget implementation which affects the budget allocation of the ministries. Once corrective measures have been in place the ministry may be able to offer effective services to its citizen by having a reliable budgeting process. The auditor General, national treasury and the public may also get to understand why we always have pending bills and might not be necessarily non-existence of the bills.

This study seeks to establish new empirical evidence that links budgetary decisions to institutional performance. Kenya's move to reform its budgeting practices and adopt the program-based budget (PBB) formats were geared towards improving the linkages between financial decisions to specific expenditure areas. The PBB formats further serve as an evaluation tool that helps public managers monitor the performance of the budget by determining which program is not absorbing funds as expected and which performance outcomes are achieved or not based on the allocated funds.

At the policy level, information gathered from this study would help policy makers, relevant ministry in charge of public finance, and public managers in charge of budget implementation in developing guidelines that set the threshold for public institutions demanding for additional budgetary allocations. The current practice is characterized by ministries requesting for funds to implement set targets. Budget reports, however, fail to

provide comprehensive explanations on how low budgetary allocations hinder the attainment of set targets.

At the individual level, this study would benefit public managers by providing them with clear guidelines that promote effective implementation of budgeting allocation decisions. Finally, this study will make academic contributions in the field of public finance, budgeting, and organizational management by demonstrating the factors affecting budgetary allocation among government.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This section presents a review of literature on determinants of budgeting allocation in public institutions. Also, the determinants of budgeting allocation are discussed based on various empirical debates. A theoretical framework and conceptual framework are discussed at the end of the section.

2.2 Theoretical Review

This section involves review of theories underlying the study. The theories discussed in this study are Agency theory, Allocation of resources theory and Theory of Budgeting.

2.2.1 Agency Theory

This theory is based on the principal-agent relationship whereby one party acts on behalf of another designated party, protecting their interests in the process. It was theory was developed by Jensen and Meckling in 1976, with their intention being to accurately describe the relationship between managerial behavior and the interest of other relevant stakeholders. It also included the aspects of agency costs and capital structure within the organization. The founders divided this theory into two key parts; namely the positivist agency theory and the principal-agent theory. Both are closely related as the principal's main objective is to get the maximum return from investment while the agent's key concern is to receive adequate compensation (Schaltegger & Burritt, 2010).

. Principal-agent relationships are visible in many aspects such as between managers and their subordinates, and between management and shareholders among others. The main

challenge facing such relationships is the moral hazard that may be occasioned by one party advancing their own selfish interests over the interests of the other party (Schaltegger & Wagner, 2011). This is usually the case when the agent pushes for their agenda, at the expense of the agenda of the principal, a situation known as the agency problem. One of the reasons for this collision of interests is information asymmetry where one party possesses information that the other party does not have. The agency theory is quite applicable in this study as it can be of help when explaining the mismatch of interests between the parties involved. For instance, when there are asymmetries in distribution of income between commercial banks, there may arise a mismatch of interest between the banking staff and deb holders.

2.2.2 Allocation of Resources Theory

The most important form of resources is money compared to all others especially in all projects (Armitage, 2018). The agency / community cannot activate any other resource without money. How other resources are contracted or expanded depends upon money in this economy which is market oriented. The ability of any organization agency to raise enough funds for project running determines its success, or having the ability to transform other kinds of resources into money or plan the activities it provided in a way that money will be available (Gizachew, 2018).

In the olden days, there were chary events and other events such as Alms Giving which were highly respected and those that were involved in issues concerning the community collected funds from the rich people and used them to do projects (Ogola and Kizito, 2018). Today, charity events are being taken differently by people as the motives behind

them have also changed. There is also dryness in resources as days go by. Despite the fact that resources are drying up, there are more needs of money so as to meet the changes and needs of the people and thus better methods need to be adopted to help the community. The community therefore has to depend largely on donors to support from other areas to improve the needs of the people (Andriessen and Drenth, 2018). The government's aid is hard to be stepped up by the people. Thus there should be adequate ways to ensure that money is raised to ensure that the public advantages from it.

To ensure that collective goals are achieved, it is important to form crowds, groups, associations and organizations according to the resource mobilization theory which involves mobilization (Aras and Crowther, 2019). Resources are the major factors that are used to emerge organizations. Social movements study is formed from sociological theory in resource mobilization. All organizations have goals and thus they use resources to ensure that they are able to mobilize people so as to be able to acquire resources. Resources are very important factors when it comes to the growth and success of any organization and they make efforts to ensure that the resources do not diminish but grow in number (Camisón, 2019).

2.2.3 The Budgeting Theory

Hirst advanced the theory of budgeting in 1987. The theory recommends that there should be a control system in order to establish opportunities and control possible risks and opportunities by planning using an effective budgetary control. A good budgetary performance can be attained through organizational objectives and performance that result from a good budget according to Shields and Young (1993). A strategy enables an

organization to have financial viability that predicts its financial performance through the budget. Most of the organizations prepare annually so as to formalize its budgeting process, control its performance and monitoring its variances (Silva & Jayamaha, 2012).

Budgets serve as a reflection of the financial implication of organizational plans, identify the resource needed in terms of amounts and the time required (Shields & Young, 1993). They form yardsticks for comparison of actual output against estimated budget and take necessary actions to correct (Sharma, 2012). Estimates in budget do allow goals and establish standards of performance with analysis of actual outcomes with the agreed standards. Those involved require to be looking forward rather than back looking (Hope & Fraser, 2013). Budgets make goals clear thereby learning codes and clearly communicating performance of an organization to individual employees (National Association of College and University Business Officers, 2005).

This theory is used to explain budgetary allocation and attainment of set targets . Budget is a critical guiding tool for planning and implementation of development programs at the ministry. Through budgeting development objectives are formulated and activities executed to realize those objectives. In addition, budgets provide standards in form of targets to be achieved. These targets provide a basis for monitoring and evaluation.

2.3 Determinant of Budgetary Allocation

The result of budget allocation process is a credible budget that is a reflection of the government's policies and priorities, it is comprehensive by covering all government activities and there is full transparency of budget processes and information. The internal

control system should ensure that the budget appropriations are not exceeded, that funds are spent as intended and that reliable information is produced. Finally, accounting systems provide for timely and reliable reporting at all levels of decision-making; and the export systems of external scrutiny by the legislature and by external audit, by holding political executives and management accountable, should help keep the budget on track and improve performance (Shand, 2012). There are several determinants of budgetary allocation which include expenditures, public revenue, program based budgeting and foreign aid.

2.3.1 Expenditures

In the course of budget allocation a key factor that has to be taken into account is the issue of cost increases (Cohen & Wheeler, 2004). In most government programs and projects cost increases are the rule rather than the exception and cases of cost increases have been known to inflate project budgets by as high as 100 percent. These increases have to be anticipated and policies formulated to counteract them or provide for them as has been suggested by Premchand (2004) through creation of a contingency reserve. The phenomena of excess expenditure also critically affect budget allocation (Premchand, 2004). It may occur as a result of cost increase or as a consequence of poor management. Excess expenditures cause instability in the resource allocation process and are discouraged by many government, some even providing legislative restrictions. Schick (1999) observes that a country can have a sound budget and financial system and still fail to achieve its intended targets. This is because the rules of the game by which the budget

is formulated and implemented are equally important and do influence outcomes (Schick 1999).

2.3.2 Public Revenue

Public revenue consists of taxes, revenue from administrative activities like fines, fees, gifts & grants. Which are classified into two categories: Tax revenue which is funded through the exchequer and Non tax revenue is basically utilized by ministries directly referred to as Appropriation in Aid (AIA). Governments need to perform various functions in the field of political, social & economic activities to maximise social and economic welfare. In order to perform these duties and functions government require large amount of resources. Taxes are the first and foremost sources of public revenue. Taxes are compulsory payments to government without expecting direct benefit or return by the tax payer. Taxes collected by Government are used to provide common benefits to all mostly in form of public welfare services. Taxes do not guarantee any direct benefit for person who pays the tax. It is not based on direct quid pro quo principle (Gaurav, 2010)

These are receipts which may be retained by a Department or Office to offset expenditure instead of being paid into the Exchequer Account of the Central Fund. The expenditure figures quoted in the Exchequer Account are net of these appropriations-in-aid. These monies aren't counted by the Exchequer because they stay within the relevant department. If we want to get a measure of how much money the government is collecting we should add these receipts and if we want total expenditure we should look at the gross expenditure figure. (White paper, 2010)

Narayan and Narayan (2006) suggest three reasons regarding the importance of nexus between government revenue and expenditure first if proper implementation on policies is taken into consideration regarding government revenue fiscal deficit can be avoided, second if causality runs from expenditure to revenue outflow increases due to the fear that government spends first and pay for it later by increasing taxes. Third in case of bidirectional causality expenditure can rise faster than revenue which can create huge budget deficits because revenue and expenditure decisions are independent of each other

2.3.3 Program Based Budgeting

According to office of budget and program evaluation, city of Philadelphia (2017) “organizing information in program based budgeting rather than at department and division level provides clearer picture on how much money is being spent on each program, the services that program delivers as well as how well the program is performing”. Program based budgeting will eventually allow departmental heads and county leadership to understand better the impact of funding each individual program. It will allow county government to earn in programs that yield high returns and also make investment in services for the citizens. The Government may identify efficiencies and achieve cost saving (Gikonyo, 2013). The failure by government to fully implement its programs denies citizens essential economic services derived from the program activities (Ndiritu, 2007). “Treasury circular number 17/2009 on preparation of budget stated that the imparity of reforming the budget process to conform to program based budget so as to guarantee fundamental long term objective of efficiency and effectiveness in public spending” (Gikonyo, 2013).

Combining a summary level line item budget with the elements from programme based budgeting and performance measurement in a medium term framework has been a powerful combination for explaining and justifying the budget in Kenya. This manner of budgeting provides a method for organising government activities into programmes. By organising its activities in this way, the government can identify alternatives for achieving each goal, to determine the costs and benefits for each alternative, and to select the alternative that is believed will maximise benefits, County Budget Operational Manual (2014). Thus programme based budgeting instils real performance related transparency into the budget by clearly linking day-to-day programme activities with the long term goals of the agency through; Identifying the operational aims of each programme and activity for the budget year; Budgeting and accounting so that to separate costs and revenues of each programme are shown; Measuring the outputs and performance of activities so that these can be related to activities' costs and to mandate/strategic objectives of the agency; Using the relevant data to establish standards and norms so that costs and performance can be evaluated and Government resources can be used more efficiently; and Long term programmes/projects just like before will be costed for the medium term with clear targets, outputs and outcomes over the three year period clearly and one can trace the outcomes.

2.3.4 Foreign Aid

Foreign aid as an institution began in 1921, and by 1960 it extended across many developing countries in Asia and Africa. Advocates of aid argue that aid helps developing countries to release binding revenue constraints, strengthen domestic institutions, pay

better salaries to public employees, assist with poverty-reducing spending, and improve the efficiency and effectiveness of governance (Brautigam and Knack 2004). Conversely, it is argued that higher aid inflows might promote rent-seeking behaviour by domestic vested interests that demand tax exemptions or seek to avoid paying taxes, which leads to a decline in revenue (Clements et al. 2004). Critics also argue that aid can lead to increased public and private consumption rather than investment, contributing less to growth (Please 1967; Papanek 1973; Weisskopf 1972). In his classic paper, Heller (1975) showed that aid increases investment and simultaneously reduces domestic borrowing and taxes which eventually has an influence on public consumption. The magnitude of such an influence over public consumption, however, depends on the type of aid, as grants have a strong „pro-consumption“ bias whereas loans are more „pro-investment“. Expanding on Heller, Khan and Hoshino (1992) concluded that aid generally increased government consumption and the marginal propensity to consume out of foreign aid is less than one, which means that some public investment is also financed from aid. Many researchers (Otim 1996; Ouattara 2006; Remmer 2004) have found considerable linkage aid and the expansion of budgetary allocation. Recent initiatives have called for a shift in aid towards grant-giving, in the belief that excessive lending has led to huge debt accumulation in many countries and has not contributed to them reaching their development objectives (Clements et al. 2004). A positive relationship between aid and GFCE as a percentage of GDP has therefore been hypothesized.

2.4 Empirical Review

Emmanuel, Oydoughan et al., (2014), in the study on critique on cash basis of accounting and budget implementation in Nigeria ,found out that cash basis has a positive significant relationship on budget implementation, investment option and expenditure pattern in the public sector, it also revealed that the right basis of accounting when used can bring about effective budget implementation which in turns results in economic growth, development and stabilization in public sector, it can also bring about follow-up on capital projects, the application of the concept of value for money audit and observation of law of integrity in the public sector.

Lee and Wang (2015) undertook a study on the effect of budget allocation practices on spending behavior across three countries, the United States, Taiwan, and China (Guangdong Province) over a number of years before and after budget allocation. The study conclude that budget allocation had differential impact on the spending growth rate in different countries (regions): there was a significant relationship between budget allocation and spending growth in Taiwan. Nevertheless, the regression coefficients were negative for the United States and China but not statistically significant.

Ho (2011) conducted a case study of budget allocation exercise in the city of Zambia in the years from 2008 to 2010 to examine the budget implications of applying performance information at the sub-departmental program level. The regression results indicated that the number of performance measures in a department was significantly and positively correlated with program budget variation. However, after controlling for other factors, he

also found that the number of outcome-related performance measures had significantly negative effects on program budget variation.

Orina, Obwogi, & Nasieku, (2019) did a study on factors affecting budgetary allocation in the county governments in Kenya. Cash flows were important to budgetary allocation in counties; the county governments had reports of actual monthly cash flows, as a means of identifying patterns for monitoring cash flows. County governments departments actual cash flows were closely tracked against departments' budget allocation and major divergences investigated. Budgetary controls were important in budgetary allocation in counties; budgetary allocations were done taking into account the forecasted revenue and expenditure projections; Counties budgets contained narrative information. Human capital enhanced budgetary allocation in counties; the county governments had a budget office that coordinated and communicated information; and that the county governments had put in place a policy that all budget making staff should be trained to enhance their budget making skills.

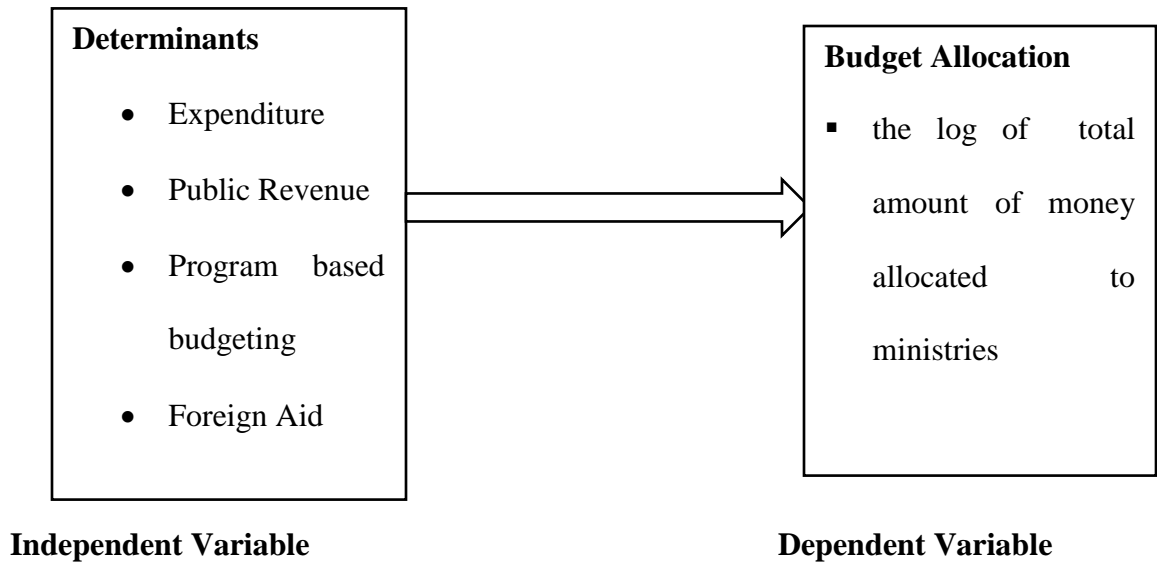
Nkanata (2012) undertook a study on the factors affecting the government spending of the budget allocations by the accounting officers in Kenya. The study adopted a descriptive survey design. The population of the study consisted of the 42 government ministries. The sample design employed yielded a sample of 70 respondents. The study found out that policies and procedures influence the spending of budget allocations. The legal and institutional framework is weak and need modification with the executive

abusing the legal provisions for enhancing budget flexibility, whereas the legislature was found to have power to control the utilization of budget allocations.

2.5 Conceptual Framework

A conceptual framework is a mental plan of thoughts that provide guidance to an examination. It empowers the connection of the dependent variable and the independent variables to be depicted (Mugenda&Mugenda 2013). Budget allocation is the dependent variable. The independent variables included; budget allocation, public revenue, program based budgeting as well as foreign aid. The study is conceptualized of the study variables are illustrated in the figure below

Figure 2.1: Conceptual Framework



Source: (Author, 2019)

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents the research design used, the research method, target population, type of data, the data collection method and justification. It also states the research instrument that was used to collect data and data analysis techniques that the researcher applied.

3.2 Research Design

Descriptive study design is the approach used in the research study. Thomas (2011) assumes that a detailed research layout is an analysis of a group of people, an event, institutions or entities that are studied comprehensively by many or a single method. Moreover, Creswell (2009) posits that the survey approach offers a systematic setting where an in-depth analysis of a certain phenomenon can be conducted. Descriptive study layout was elected for this research study as the research study sought to collect information on determinants of budgetary allocations in the Kenyan ministries. This makes descriptive research design the best suited to achieve the study objectives.

3.3 Target Population

The population of the study comprised all the 21 ministries as were then established – see Appendix I. This number of ministries is small and data is easily collected from them. This makes the research a census study in which the researcher targeted to collect data from the entire population, hence attaining higher accuracy levels (Mugenda and Mugenda, 2003).

3.4 Data Collection

Secondary data collection method was used in this study. The secondary data was collected from printed estimates; Government ministries published Final accounts, The National Treasury, The Appropriation Accounts, Other Public Accounts, The Controller Auditor General Reports as well as any other source that can provide the needed information. Data was collected for the period between the years 2014 to 2018 for comparative purposes.

3.5 Diagnostic Tests

Diagnostic tests were employed in the study to ascertain the reliability of the outcome. Normality, Autocorrelation and Multicollinearity tests were mainly diagnosed. Normality is a test of assumption that the residual of the response variable are normally distributed around the mean. Autocorrelation test is the measurement of the similarity between a certain time series and lagged value of the same time series over successive time intervals. It was tested using Durbin-Watson. This test reports a test statistic with a value of 0 to 4 where 2 is no autocorrelation, where the statistic is less than two there is positive autocorrelation and where greater than two there is negative autocorrelation (Khan, 2008). Test to ensure the data collected is free from biasness and one variable data is not related to another variable data, the study conducted a multicollinearity test. It occurs when there is nearly exact or exact linear relation among two or more of the independent variables. The variance of Inflation will be used to test multicollinearity. Whenever the values of VIF is between 1 and 10, then there is no multicollinearity while when the VIF is less than 1 or greater than 10, then there is presence of multicollinearity. When the test

fails you should standardize the continuous variables by choosing on a standardization method on the regression dialog box. For instance you may choose variable centering appBudget allocationch (Cohen, West & Aiken, 2013). For Heteroscedasticity test the study applied Breusch Pagan to determine the consistency of the variance across the observation. Heteroscedasticity occurs in cases in which variance is different across the observation. This may lead to a biased estimation.

3.6 Data Analysis

Data collected for a five year period from 2014 to 2018 was edited and cleaned for any possible errors and omission first; thereafter data was coded in order to ease analysis. SPSS version 22 was utilized for the analysis of the collected data. Descriptive statistics were utilized to summarize the collected data. This included standard deviation and mean.

3.6.1 Analytical Model

To determine the determinants of budgeting allocation among government ministries, a regression analysis will be conducted.

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + e$$

Where,

Y = Budget allocation which was measured by the log of total amount of money allocated to ministries

X₁ = Expenditures was measured by the log of total annual amount of Expenditures in each ministry

X₂ = Public Revenue which was measured by the log of total revenue collected

X_3 = Program Based Budgeting which was measured by the ratio of cost to revenues for each program during budgeting and accounting

X_4 =Foreign aid was measured by the log of total annual value of foreign aid

E = error term

3.6.2 Test of Significance

Analysis of Variance (ANOVA) and F- test was used to determine significance level of the regression model at 95% level of confidence. Correlation analysis was performed so as to establish the kind of relationship that exists between determinants of budgetary allocation in government ministries in Kenya. Coefficient of determinant (R^2) was used to determine how much variations in budgeting allocation can be explained by expenditures, public revenue, program based budgeting and foreign aid.

CHAPTER FOUR: DATA ANALYSIS AND PRESENTATION

4.1 Introduction

This chapter presents the analysis and the results of the study. The overall aim of this study was to investigate the determinants of budgeting allocation among government ministries. Determinants (which form independent variables) consisted of; expenditures, public revenue, program based budgeting as well as the foreign aid. Budgeting allocation among government ministries was the dependent variable. The investigation was founded on the obtained data.

4.2 Descriptive Statistics

Descriptive statistics are the measures that define the general nature of the data under study. They define the nature of response from primary data and/or secondary data. Descriptive statistics for this study were: mean, standard deviation, minimum and maximum. Table 4.1 below presents the descriptive statistics for the study variables. The Budget Allocation, Expenditures, Public Revenue, Program Based Budgeting and foreign aid in the five year period was a gradual increase.

Table 4.1: Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Budget Allocation	21	9.20	11.53	10.4745	.66882
Expenditures	21	9.10	10.81	9.9304	.54645
Public Revenue	21	9.02	11.86	10.8752	.82173
Program Based Budgeting	21	.01	.96	.2686	.29942
Foreign aid	21	7.00	9.84	8.8567	.82130

From the data received from the government ministries in Kenya (Table 4.1), the findings indicate that the mean average budget allocation was Ksh. 29,819,475,479 (antilog of 10.4745) with a standard deviation of 0.66882. The mean of expenditures was Ksh. 8,519,223,264 (antilog of 9.9304) with a standard deviation of 0.54645. The mean of Public Revenue was Ksh. 75,023,962,791 (antilog of 10.8752) with a standard deviation of 0.82173, the mean of program based budgeting ratio was 0.2686 with a standard deviation of .29942, the mean of foreign aid was Ksh. 718,952,171.9 with a standard deviation of .82130

4.3 Diagnostic Tests

The research paper was able to make an establishment of how suitable the data was by examining on the multicollinearity for the different kind of variables and the outcome are going to be discussed in the following section.

4.3.1 Tests of Normality

The proper application of the parameters of inferential statistics the assumption of normality is tested. This is to ensure that the kurtosis and skewness of the data is tested. This is just to make a confirmation on whether the data under study is normally distributed. The data normality was then tested by use of Kolmogorov-Smirnov Test and the Shapiro-Wilk Test. The second method is best used when the sample of the data is small i.e. less than fifty. The method is much more reliable especially when making a determination on kurtosis and skewness of the data. When the result is below 0.05, then it is slowly deviating from the distribution of the data that is normal.

Table 4.2: Shapiro-Wilk Test of Normality

Variables	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Budget Allocation	0.268	21	0.327	0.721	21	0.316
Expenditures	0.342	21	0.327	0.656	21	0.316
Public Revenue	0.311	21	0.327	0.742	21	0.316
Program Based Budgeting			0.327			0.316
Budgeting	0.363	21		0.703	21	
Foreign aid	0.309	21	0.327	0.616	21	0.316

In accordance to the results, the Shapiro-Walk values were 0.268 for budget allocation, 0.342 for expenditures, 0.311 for public revenue, 0.363 for program based budgeting and 0.309 for asset foreign aid. Kolmogorov-smirnov tested significant values were at 0.316

for budget allocation, Expenditures, Public Revenue, Program Based Budgeting and foreign aid each. This brings an implication that the p-value is far much greater than level 0.05 then the prediction that the data was normally distributed cannot be denied. The tested results are therefore of the population emanating from the normal distribution.

4.3.2 Test for Multi-collinearity

Multicollinearity inflates the standard errors and gives spurious results hence it is necessary to test for presence of multicollinearity before running an ordinary least square regression model. This study used a variance management efficiency factor (VIF) method to test for multicollinearity of the study variables. The results as shown in Table 4.3 revealed that there was no presence of multicollinearity since all the values of VIF were between 1-10. This implies that the use of regression analysis in estimating the determinants of budgeting allocation among government ministries in Kenya was justified.

Table 4.3: Coefficients^a

	Colinearity Statistics	VIF
	Tolerance	
Budget Allocation	.500	2.000
Expenditures	.608	1.646
Public Revenue	.633	1.580
Program Based Budgeting	.493	2.027
Foreign aid	.242	2.083

In the results above, all the VIFs are very low because they are well below 5. These values suggest that the coefficients are well estimated and the study should trust their p-values.

4.3.3 Heteroscedasticity

This takes place when the error term of the variance is different across the observed data. The heteroscedasticity is very essential in examination of the difference that exist in the variance of the observation to the other (Godfrey, 1996). The research work maximised on the conduct of regression analysis of the independent variables Glejser test (1969). In accordance to this case, the assumption made is that if the value >0.05 , then there should be very minimal problem of the heteroscedasticity. The results for tests of Heteroscedasticity were as presented in Table 4.4.

Table 4.4: Test for Heteroscedasticity

Coefficients^a					
Model	Unstandardized		Standardized	t	Sig.
	Coefficients		Coefficients		
	B	Std. Error	Beta		
(Constant)	1.125	0.012		3.856	0.000
Expenditures	0.096	0.056	0.112	0.258	0.148
Public	0.256	0.089	0.349	0.481	0.860
Revenue					
Program Based	0.174	0.070	0.145	0.463	0.089
Budgeting					
Foreign aid	0.102	0.073	0.123	0.412	0.065

a. Dependent Variable: Budget Allocation

Basing on the level of output, the values obtained >0.05 , hence there is no big difference existing in the variation of dependent to independent variables that were tested

4.4 Inferential Statistics

Correlation and regression analysis were performed in order to establish the determinants of budgeting allocation among government ministries.

4.4.1 Correlation Analysis

Correlation analysis was done to establish the relationship between expenditures, public revenue, program based budgeting as well as foreign aid and budget allocation.

Table 4.5: Correlation Analysis

	Budget Allocation	Expenditures	Public Revenue	Program Based Budgeting	Foreign aid
Budget Allocation	1				
Expenditures	0.83	1			
Public Revenue	0.23	0.13	1		
Program Based Budgeting	0.66	0.21	0.48	1	
Foreign aid	0.74	0.18	0.63	0.49	1

Results presented by the correlation matrix indicate that there is significant correlation between the dependent and all the independent variables. A very strong positive relationship was established between the expenditures and budgeting allocation of government ministries as indicated by the Pearson's $r = 0.83$. A weak positive relationship was established between the public revenue and budgeting allocation of government ministries ($r = 0.23$). A strong positive relationship was established between the program based budgeting and budgeting allocation of government ministries as indicated by the Pearson's $r = 0.66$. Further Foreign aid exhibited a strong relationship

on budgeting allocation of government ministries($r = 0.74$). It can be deduced from the matrix of correlation that a strong but significant correlation between the independent and the dependent variables exists.

4.4.2 Regression Analysis

Regression analysis is the statistical technique that identifies the relationship between two or more quantitative variables: a dependent variable, whose value is to be predicted, and an independent or explanatory variable (or variables), about which knowledge is available. The technique is used to find the equation that represents the relationship between the variables. Multiple regressions provide an equation that predicts one variable from two or more independent variables.

The researcher conducted a multiple regression analysis so as to test relationship among variables (independent) on the budgeting allocation among government ministries. The researcher applied the statistical package for social sciences (SPSS V 22.0) to code, enter and compute the measurements of the multiple regressions for the study. Coefficient of determination explains the extent to which changes in the dependent variable can be explained by the change in the independent variables or the percentage of variation in the dependent variable (budgeting allocation among government ministries) that is explained by all the four independent variables (expenditures, public revenue, program based budgeting and foreign aid).

Table 4.6 shows the regression model summary results where R square, adjusted R square and standard error of estimate are presented.

A multiple regression analysis was performed to test the association among predictor variables.

Table 4.6: Model Summary

R	R Square	Adjusted R Square	Std. Error of the Estimate
.916 ^a	.839	.799	1.211

The results in Table 4.6 indicate that the expenditures, public revenue, program based budgeting and foreign aid had a joint significant effect on budgeting allocation among government ministries e as shown by r value of 0.916. The R squared of 0.839 shows that the independent variables accounted for 83.9% of the variance on budgeting allocation among government ministries.

Table 4.7: ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	145.223	4	36.306	20.844	0.000003
	Residual	27.868	16	1.742		
	Total	173.091	20			

a. Predictors: Expenditures, Public Revenue, Program Based Budgeting, foreign aid,

b. Dependent Variable: Budget Allocation

The ANOVA statistics in the table above show a significance level of 0.000003 which indicates that the model and the data thereof can be relied upon to make conclusive inferences. The critical value (3.01 <20.844) was less than the F calculated which is an

indication that the foregoing independent variables were significantly influencing budgeting allocation among government ministries in Kenya.

Table 4.8: Coefficients

	Unstandardized		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
(Constant)	3.936	0.451		8.727	0.0000
Expenditures	0.741	0.213	0.146	3.479	0.0031
Public Revenue	0.667	0.179	0.126	3.726	0.0018
Program Based Budgeting	0.737	0.280	0.045	2.632	0.0181
Foreign aid	0.549	0.222	0.142	2.473	0.0250

The overall regression model for this model was:

$$Y = 3.936 + 0.741X_1 + 0.667X_2 + 0.737X_3 + 0.549X_4.$$

Expenditures have a positive influence on budgeting allocation among government ministries in Kenya. It indicates that any unit increase in the expenditures will cause budgeting allocation among government ministries in Kenya to increase by 0.741. Increase in public revenue was confirmed to cause an increase in the budgeting allocation among government ministries in Kenya due to the positive effect by 0.667. Program Based Budgeting showed a positive impact on budgeting allocation which means that it increases budgeting allocation among government ministries in Kenya by 0.737 as a result of a unit increase. In addition, foreign aid showed a positive impact on budgeting allocation which means that it increases budgeting allocation among government ministries in Kenya by 0.549 as a result of a unit increase.

4.5 Discussion of Findings

Expenditures have a positive influence on budgeting allocation among government ministries in Kenya. It indicates that any unit increase in the expenditures will cause budgeting allocation among government ministries in Kenya to increase by 0.741. Increase in public revenue was confirmed to cause an increase in the budgeting allocation among government ministries in Kenya due to the positive effect by 0.667. Program Based Budgeting showed a positive impact on budgeting allocation which means that it increases budgeting allocation among government ministries in Kenya by 0.737 as a result of a unit increase. In addition, foreign aid showed a positive impact on budgeting allocation which means that it increases budgeting allocation among government ministries in Kenya by 0.549 as a result of a unit increase.

Similar to the study findings, In the course of budget allocation a key factor that has to be taken into account is the issue of cost increases (Cohen & Wheeler, 2004). In most government programs and projects cost increases are the rule rather than the exception and cases of cost increases have been known to inflate project budgets by as high as 100 percent. These increases have to be anticipated and policies formulated to counteract them or provide for them as has been suggested by Premchand (2004) through creation of a contingency reserve. The phenomena of excess expenditure also critically affect budget allocation (Premchand, 2004). Heller, Khan and Hoshino (1992) concluded that aid generally increased government consumption and the marginal propensity to consume out of foreign aid is less than one, which means that some public investment is also financed from aid. Many researchers (Otim 1996; Ouattara 2006; Remmer 2004) have found considerable linkage aid and the expansion of budgetary allocation. Recent initiatives

have called for a shift in aid towards grant-giving, in the belief that excessive lending has led to huge debt accumulation in many countries and has not contributed to them reaching their development objectives (Clements et al. 2004).

CHAPTER FIVE : SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

The aim of this chapter was to avail a summary, make conclusions and recommend on necessary measures to improve the identified qualitative and quantitative analysis analyzed in chapter four.

5.2 Summary of Findings

The ANOVA was employed to determine how strong the model was in the analysis. From the analysis of the regression statistics, the research concluded that the four major factors which included expenditures, public revenue, program based budgeting, and foreign aid had an effect on the budgeting allocation among government ministries in Kenya. The variables were able to explain their influence on the budgeting allocation among government ministries in Kenya up to 83.9% and the rest is contributed by other factors not considered in this study meaning the model was significant.

From the study, the correlation coefficient obtained, A very strong positive relationship was established between the expenditures and budgeting allocation of government ministries as indicated by the Pearson's $r = 0.83$. A weak positive relationship was established between the public revenue and budgeting allocation of government ministries ($r = 0.23$). A strong positive relationship was established between the expenditures and budgeting allocation of government ministries as indicated by the Pearson's $r = 0.66$. Further Foreign aid exhibited a strong relationship on budgeting allocation of government ministries ($r = 0.74$). It can be deduced from the matrix of

correlation that a strong but significant correlation between the independent variables exists.

5.3 Conclusion

The study concludes that expenditures have a positive influence on budgeting allocation among government ministries in Kenya. It concludes that any unit increase in the expenditures will cause budgeting allocation among government ministries in Kenya to increase by 0.741. Increase in public revenue was confirmed to cause an increase in the budgeting allocation among government ministries in Kenya due to the positive effect by 0.667. Program Based Budgeting showed a positive impact on budgeting allocation which means that it increases budgeting allocation among government ministries in Kenya by 0.737 as a result of a unit increase. In addition, foreign aid showed a positive impact on budgeting allocation which means that it increases budgeting allocation among government ministries in Kenya by 0.549 as a result of a unit increase.

5.4 Recommendations

The study recommends that success rates in the expenditure should be considered during budget allocations. This will ensure that the ministries are more accountable to the funds allocated and priority areas specified during allocation are covered.

The study recommends that the government should emphasis on meeting the funding targets that instruct government agencies to limit their budget requests by specific amounts. This practice will ensure that government spending is carried out efficiently

There should be an integrated financial framework that monitors the link between budget allocation and government expenditures. If government cannot determine where public expenditures delivers results and where it does not, both the taxpayer and society as a whole will continue paying for ineffective and inefficient programmes.

5.5 Limitation of the Study

The whole process of data collection compiling analyzing and report writing was costly and it needed extra funds which called for total sacrifice to achieve the objectives. Despite the limited financial resources, the entire research process was successful. The researcher also faced time constraint.

This research was conducted over a five year period which may not be as conclusive as if a much longer period was used for example twenty years. When a period of study is longer it means more data is utilized which guarantees more conclusive outcomes from the study unlike when the period of study is very short.

This study relied only on secondary data for analysis. Qualitative aspects which also affect budgeting allocation were not captured in the model of the study. By utilizing both quantitative and qualitative data, results can be more conclusive in some studies by capturing all the information.

5.6 Suggestions for Future Research

A study to be conducted using primary data since one on one interview could bring different results. This can be compared with the results from the secondary data to determine if there can be variations in the results. By combining primary and secondary data, a researcher is in a position to capture all aspects in research

REFERENCES

- Adongo, K., O & Jagongo, A. (2013). Budgetary Control as a Measure of Financial Performance of State Corporations in Kenya. *International journal of accounting and taxation* vol. 1 no. 1, December 2013
- Allen, F.G., Garrity, J.R., and Schiavo-Campo, B.S. (2014). Government Revenues and Expenditures in Guinea-Bissau: Causality and Cointegration, World Bank Group Africa Region Working Paper Series No. 65
- Aregbeyen, S. & Baba, L. (2013). *Causal Linkages between Government Revenue and Spending: Evidence from Ghana*. Bank of Ghana Working Paper, WP/BOG2013/13.
- Bhatia, R. (2013). Do Revenues or Expenditures respond to Budgetary Disequilibria? *Southern Economic Journal*, 61(2), 311-322.
- Chang, T. (2015). Revisiting the Government Revenue-Expenditure Nexus: Evidence from 15 OECD Countries based on the Panel Data Approach. *Czech Journal of Economics and Finance*, (59)2, 165-172.
- Denhardt, R. B., and Denhardt, J. V. (2000). The new public service: Serving rather than steering. *Public administration review*, 60(6), 549-559.
- Dunk, A.S. (2011). Product innovation, budgetary control, and the financial performance of firms. *The British Accounting Review*, 43(2), 102-111.
- Ellig, J. (2000). Performance Report Scorecard: Which Federal Agencies Inform the Public? George Mason University, Mercatus Center.
- Ellig, J., McTigue, M., & Wray, H. (2016). *Government Performance and Results: an evaluation of GPRA's first decade*. Routledge.

- Erlina, A. S., and Muda, I. (2017). The Analysis of the Influencing Factors of Budget Absorption. *International Journal of Economic Research*, 14(12), 287-300.
- Ewell, P. T. (1999). Linking performance measures to resource allocation: Exploring unmapped terrain. *Quality in Higher Education*, 5(3), 191-209.
- Ewell, P.T. (1994). Developing statewide performance indicators for higher education: policy themes and variations, in: Ruppert, S. (Ed.) *Charting Higher Education Accountability: a sourcebook on state-level performance indicators*. Denver, CO, Education Commission of the States, pp. 121-166.
- Fitzgerald, L., Johnston, R., Brignall, S., Silvestro, R. and Voss, C. (1991). *Performance Measurement in Service Businesses*, London, CIMA.
- Gikonyo, W. (2013). *Understanding Devolved Government in Kenya*. Nairobi: The Institute for Social Accountability.
- Kanyinga, K. (2014). *Kenya: Democracy and Political participation*. Open Society of Foundation. Nairobi, Kenya
- Kelsh, C. (2016). Presidential Influence on the Federal Budget. Harvard Law - Federal Budget Seminar: Briefing Paper No. 61.
- Kirimi, C.J. (2012) Factors that affect budget utilization by government ministries in Kenya. *Unpublished MBA Project, University Of Nairobi*.
- Lee, J. Y. J., & Wang, X. (2015). Assessing the impact of performance-based budgeting: a comparative analysis across the United States, Taiwan, and China. *Public Administration Review*, 69, S60-S66.

- Maritim, C. F. (2013). The effects of budgeting process on financial performance of commercial and manufacturing parastatals in Kenya (Unpublished MBA Thesis), University of Nairobi
- Ndiritu, G.M. (2007). Effectiveness of Cash Budgeting in Public Institutions: A Case Study of Telkom Kenya Ltd (*Unpublished MBA Project*), University of Nairobi.
- Nkanata, E.K. (2012). The factors affecting the government spending of the budget allocations by the accounting officers in Kenya. *An unpublished MBA project. Kenyatta University.*
- Peteraf, M., & Barney, J. (2003). Unravelling the Resource-Based Tangle, Managerial and Decision Economics. *International Business Journal*, 24(1), 309-323.
- Pretorius M (2015). Critical variables of business failure: A review and classification framework. *South African Journal of Economic and Management Sciences (SAJEMS)*, 11(4), 408-430.
- Shand, T. (2012). Statistical Inference in Vector Autoregressions with Possibly Integrated Processes, *Journal of Econometrics*, (66)1,2,225-250.
- Shields, M. D., & Young, S. M. (1993). Antecedents and Consequences of Participative Budgeting: Evidence on the Effects of Asymmetrical Information. *Journal of Management Accounting Research*, 5(265-280).
- Von Hagen, J. (2002). Fiscal Rules, Fiscal Institutions, and Fiscal Performance. *Journal of Economic and Social Review* 33 (3): 263-284
- Witt, S. & Muller, Y. (2014). The Revenue-Expenditure Nexus: The Experience of 13 African Countries. *African Development Review*, (20)2,273-283

Zipporah, W. M. (2017). Effects of budgeting and budgetary control on financial performance on devolved government in Kenya(Unpublished MBA Thesis), University of Nairobi.

Appendix I: Government Ministries Established in Kenya

1.	Ministry of Interior and Co-ordination of National Government
2.	The National Treasury and Planning
3.	Ministry of Industry, Trade & Co-operatives
4.	Ministry of Agriculture, Livestock, Fisheries, and Irrigation
5.	Ministry of Transport, Infrastructure, Housing, Urban Development, and Public Works
6.	Ministry of Devolution and the ASALS
7.	Ministry of Information, Communication, and Technology (ICT)
8.	Ministry of Sports, Culture, and Heritage
9.	Ministry of Education
10.	Ministry of East African Community (EAC) and Regional Development
11.	Ministry of Labour and Social Protection
12.	Ministry of Tourism and Wildlife
13.	Ministry of Petroleum and Mining
14.	Ministry of Public Service, Youth, and Gender
15.	Ministry of Defence
16.	Ministry of Foreign Affairs
17.	Ministry of Health
18.	Ministry of Environment and Forestry
19.	Ministry of Water and Sanitation

20.	Ministry of Lands and Physical Planning
21.	Ministry of Energy

Appendix II: Raw Data

	Budget allocation	Log of Budget allocation	Expenditure	Log of expenditure	Public Revenue	Log of Public Revenue	Program Based Budgeting	Foreign Aid	Log of foreign aid
Ministry of Interior and Co-ordination of National Government	148960000000	11.173	55,103,400,000	10.741	1045600000	9.02	0.71	10,000,000	7
The National Treasury and Planning	6700000000	9.826	27,289,700,000	10.436	7847798898	9.89	0.03	75,055,460	7.875
Ministry of Industry, Trade & Co-operatives	11200000000	10.049	1,720,500,000	9.236	3140145920	9.50	0.05	30,032,000	7.478
Ministry of Agriculture, Livestock, Fisheries, and Irrigation	69600000000	10.843	14,932,000,000	10.174	90048631408	10.95	0.33	861,214,914	8.935
Ministry of Transport, Infrastructure, Housing, Urban Development, and Public Works	211600000000	11.259	49,213,200,000	10.692	414835763124	11.62	0.87	3,967,442,264	9.599

Ministry of Devolution and the ASALS	19600000000	10.292	3,985,600,000.00	9.6	455975336367	11.66	0.09	4,360,896,484	9.64
Ministry of Information, Communication, and Technology (ICT)	202000000000	11.305	5,409,400,000	9.733	49666000000	10.70	0.96	475,000,000	8.677
Ministry of Sports, Culture, and Heritage	8600000000	9.934	6,713,500,000	9.827	274589198400	11.44	0.04	2,626,140,000	9.419
Ministry of Education	339300000000	11.531	35,204,900,000	10.547	494568800000	11.69	0.61	4,730,000,000	9.675
Ministry of East African Community (EAC) and Regional Development	1600000000	9.204	5,228,500,000	9.721	381853120000	11.58	0.01	3,652,000,000	9.563
Ministry of Labour and Social Protection	25100000000	10.4	2,135,800,000	9.33	6365926480	9.80	0.12	60,883,000	7.784
Ministry of Tourism and Wildlife	8000000000	9.903	2,634,100,000	9.421	220294399346	11.34	0.04	2,106,870,690	9.324
Ministry of Petroleum and Mining	4600000000	9.663	2,344,900,000	9.37	48394187681	10.68	0.02	462,836,531	8.665

Ministry of Public Service, Youth, and Gender	5300000000	9.724	3,060,800,000	9.486	716704741016	11.86	0.03	6,854,482,986	9.836
Ministry of Defence	265000000000	11.423	64,687,400,000	10.811	78824405144	10.90	0.26	753,867,685	8.877
Ministry of Foreign Affairs	7900000000	9.898	6,473,400,000.00	9.811	276404360000	11.44	0.04	2,643,500,000	9.422
Ministry of Health	60300000000	10.78	30,197,500,000	10.48	102468800000	11.01	0.29	980,000,000	8.991
Ministry of Environment and Forestry	26000000000	10.415	1,251,400,000	9.097	330933255928	11.52	0.12	3,165,008,216	9.5
Ministry of Water and Sanitation	62300000000	10.794	5,592,300,000.00	9.748	289380905422	11.46	0.3	2,767,606,211	9.442
Ministry of Lands and Physical Planning	28900000000	10.461	5,549,800,000	9.744	17873917710	10.25	0.14	170,944,125	8.233
Ministry of Energy	122300000000	11.087	34,412,300,000.00	10.537	11857104000	10.07	0.58	113,400,000	8.055