THE EFFECT OF NATIONAL REVENUE ALLOCATION ON THE COUNTY

ECONOMIC GROWTH IN KENYA

BY

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DECLARATION

I declare that this is my work and has not been presented to any institution or university other

than the University of Nairobi for examination.

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This research project has been presented for examination with my approval as the University

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DEDICATION

I dedicate this project to my mum Severina Kirimi and to my late dad Julius Kirimi for their great love, immense support and sacrifices to see me succeed.

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LIST OF ABBREVIATIONS AND ACRONYMS

- ASAL Arid and Semi-Arid Lands
- **CRA** Commission on Revenue Allocation
- **ECM** Error Correlation Model
- GCP Gross County Product
- **GDP** Gross Domestic Product
- **IMF** International Monetary Fund
- **OECD** Organization for Economic Co-operation and Development
- **VECM** Vector Error Correction Model

ABSTRACT

With the emergence of county governments and their subsequent allocation of money from the central government, it has become very important to monitor their performance and especially in terms of their economic wellbeing through GCP. This study sought to establish the relationship between national government allocations to the counties and county economic conditions as indicated by their gross county product. The study also recognized other factors which could have an influence in the relationship and studies them together with the main predictor variable. The variables were the county government's economic activities as indicated by their local revenue generation and the fiscal discipline in the counties as measured by their amounts of pending bills. The other variable studied was the allocations to development budgets. The study results indicated that national government allocations had a positive significant effect on the gross county product. This leads to the recommendation that more funds should be allocated to the counties as it has proved to contribute to a positive changes in their GCP. The study also established that net pending bills affected gross county product positively. This is shows that pending bills are beneficial in uplifting the economic status of the county governments. This is an indication that spending beyond revenue availability was in projects and commitments, which were beneficial to the counties. This however flouts the Zero Based Budgeting expected in the Public Finance Management Act. To redress the situation and avoid impacting negatively on GCP, while ensuring that county governments operate within the law, it is a recommendation of this study that more funds be allocated to the counties from national government to enable them cover the pending bills. The national government should also develop mechanisms for making counties to realize their full potential to enable them generate more local revenue. The other variable was the development budget allocation, which was also found to have a positive impact on GCP though the effect was insignificant. This indicates that allocating more to the development expenditure could really uplift the counties economic situation and needed to be emphasized. The national government can also come in and assist in implementing capital development projects which are beyond the affordability of the counties. The last variable studied was the local revenue collection which had a positive impact on GCP. This indicates that the more the counties collect, the better the counties became economically. Analysis of the combination of this factors shows that management in the counties in Kenya tend towards the positive side and needs to be supported. The national government can help by allocating more resources and helping in implementing development projects. Donor grants can also be sought as it has been observed that there is a reasonable degree of good county management geared towards economic development in the counties.

CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

Researchers and policy makers across the world economies continue to engage in discussions and debates about how the growth and expansion of an economy can be influenced by the manner in which the governments allocate available economic resources during planning and implementation of budgets. Matters related to budgets are very essential, as they are critical in contributing to an upward trend in growth of economies. As counties in Kenya are to some extend dependent on national government allocations, their growth can be related in a way to the amounts allocated. Allocations have been based on an advice of the CRA to the national assembly (Kimenyi, 2013). The CRA considerations have been based on population, land mass, poverty index, basic equal share and an incentive for fiscal responsibility (Kimenyi, 2013). Since these are key factors in county economic growth, it is expected that allocations from the national government contribute positively towards the county economic growth. It is also a common agreement among various scholars that, proper budget allocation and implementation is an instrument of force suitable for driving the economy upwards in terms of gross domestic product (Oni, Aniakam & Akinsanya, as cited by Sriyalatha & Torii, n.d)).

Various theorists have immensely contributed knowledge and provided different models in an attempt to describe the association that exists between national revenue allocation and the growth of economy. Among them is the Wagner's theory of organic state coined by Wagner (1890). The theory states that public expenditure expands because of expansion of the economy meaning public expenditure is the dependent variable whose expansion or contraction is determined by economic growth (Wagner, 1890). Other contributors are Nagel (1991) through the Theory of Rationale and Feasible Budget Allocation and also Gallagher (1993) through the Public Choice Theory of Budget. Whereas Gallagher (1993) emphasized

on fairness in allocation of national resources, Nagel (1991) has made recommendable contribution through insisting in setting of objectives to guide allocations. There is also the Rostow-Musgrave Model by Rostow and Musgrave, as cited by Aladejare (2013) which states that an economy, which is in her early stages of economic growth, should spend more to ensure the economy does not collapse. This is very relevant as counties are in their early stages of economic growth.

Kenya is among African economies with the potential to perform very well economically due to her dynamic and robust private sector, youthful and innovative population, very skilled workforce, improved infrastructure, geographical location and the devolved system of government. The World Bank (2018) believes that Kenya is capable of attaining a rapid and sustained growth if she can succeed in combating inequality, poor governance, poverty, climate change, mismatch in education curriculum and job market requirements and low investments. The country can also benefit from Devolution which is increasingly being undertaken by governments of the world and the reason for this is the fact that when resources are transferred to sub national governments, delivery of services becomes more efficiently enabled and leads to acceleration of economic development (IMF, 2016).

1.1.1 National Revenue Allocation

Despite existing consensus on general budget cycle stages, there is no a globally settled upon definition of what budget allocation is among scholars and policy makers (Pretorius & Pretorius, 2008). The most common definitions however pins down budget allocation to refer to the activities related to planning, implementation, control, monitoring, and evaluation, accounting and reporting of budgets (Allen, Schiavo-Campo &Garrity, 2004). Rosen (2004) alternatively defines it as the process of taxing, expending and administration of public debts, which defines the process of resource allocation and distribution of income.

A robust system of budget allocation is very useful in realizing government strategic goals and objectives and requires a series of steps that are realistic and platforms that can accommodate and manage multiple roles and relationships. The system of budget allocation highlights the link between various components of the economy and different players. It also enhances fiscal discipline, amounts of development budgets, budgeting policy implementation, efficiency in resources utilization and transparency. The effect of budget allocation system is creation of a credible budget, which reflects the government's policies and priorities, its comprehensiveness by covering all activities and ensuring full transparency of budgeting process (Nashon, 2018).

Various scholars have used various determinants to measure budget allocation. For instance, Nyamongo et al. (2007) cites aspects such as pattern of government spending, levels of borrowing and budget deficits as key determinants in budget allocation. Pollitt and Bouckaert (2004) alluded to the level of available local resources and availability of external resources to fill in the shortfall. This means National budget allocation is determined by the level of available resources at counties as shown by the poverty index among other factors (Kimenyi, 2013). This study used actual disbursements from the national government to the county governments to determine the national revenue allocation.

1.1.2 Economic Growth

Bakang (2015) defines economic growth as an expansion in the capacity of state in producing goods and services as time goes by. It also refers to the rise in the value of goods and services that exist in an economic market over a specified time period. It is measured using different indicators of which, gross domestic product (GDP) is the most common. Other indicators include per capita income, economic value of goods and services, foreign trade balance, life expectancy, personal consumption and literacy.

Various studies carried out have used different indicators to measure economic growth. For instance, Abbott and Jones (2011), used expenditure by the government as a determinant of economic growth. Sultan and Haque (2011), and Tekin (2012) applied exports and imports to determine economic growth while Acemoglu (2009) identifies six major factors that shapes economic growth. The factors are grouped into three. The groups are supply factors, which includes technology, capital goods, natural resources, human capital, efficiency and demand. Other factors are non-economic and they include government efficiency, institutions, and administrative systems, political, demographic, cultural, social and geographical factors. This study used Gross County Product to measure economic growth.

1.1.3 National Revenue Allocation and Economic Growth

Economic growth in counties has attracted high interest due to its relatedness with success of devolution. As per Wagner (1980), there is a direct link between budget allocations and economic growth. This means that national budget allocations are indispensable if county economic growth was to be achieved. The allocations adds to the diversity in revenue sources as advocated by Public Choice Theory of Budget by Gallagher (1993). In Kenya, the counties share only 15% of the national government total budget. Considering the advice by the Rostow-Musgrave Model on more spending by economies in early stages of development, it can be seen that the allocations are not adequate to meet the challenges faced by these young units and their success may be compromised. These theories suggest that for economic growth in counties to be achieved, counties need to diversify their sources and the national government needs to distribute a higher percentage of their budget to the counties.

Apart from the allocations, there are other factors, which are expected to affect the performance of county governments. Among them are development budgets, fiscal discipline and county economic potential among others. Cannon and Ali (2018) purported that

misallocation can hinder growth though they observed that with limited budgets, counties may find it very hard to invest in development projects which compete with current expenditures. Kerich (2017) observed a common trend of fiscal indiscipline in counties in Kenya, which was evidenced in a lot of pending bills after financial year-end. On the other end, Cheruiyot, Oketch, Namusonge and Sakwa, (2017), observed that counties had limited resources to contribute to their economic growth. They observed that only developed and urban counties had industries, which could generate revenue to those particular counties. The researchers noted that counties needed to emphasize other streams like agriculture, tourism, and mining to boost their revenues.

1.1.4 County Governments in Kenya

The objectives of County governments are in most cases numerous and unlimited against the limited resources available and hence county governments have been unable to achieve most of their goals due to the reasons of having inadequate funds. Governors and senators have been pushing for an increase for money allocated to devolved money to enable county governments meet their development goals (Luvembe& Mutai, 2019). Before, during and after devolution, the government of Kenya has been working tirelessly towards promotion of rapid economic growth and different years have had different tastes of economic growth. Kenya has had fluctuating economic growth, measured using Gross County Product (GCP), between 2012 and 2017.

There have been disparities, which are worthy to be noted in the size of economic growth across county governments between 2013 and 2017. Nairobi County has been in average the leader with a contribution of about 21.7 percent to the GDP over the period, with Nakuru (6.1%) following as second, Kiambu (5.5%) as third and Mombasa (4.7%) closing the list of the four best counties in terms of economic contribution to the national economy (Tanui,

2019). The counties' economy vary from one county to the next as some counties which are more urban like Nairobi and others which are agricultural leading in terms of Gross County Product (GCP).

Different counties are faced with different challenges. Some of the challenges are inherent to the part of the country while others are related to the kind of people running the affairs of the counties. Those related to the county management are like development budgets as determined by Letoo (2019) and the fiscal discipline levels by Kerich (2017). Geographically some are arid and semiarid hence hunger and drought are prevalent among their inhabitants. These conditions reduce the county own revenue generation potential. Other counties face challenges of insecurity where their inhabitants fight occasionally because of the evil of cattle rustling and fighting over pastoralism land (GoK, 2018). Although CRA has put some of these factors into consideration through weighting several factors, the situation is diverse and has not, and is hard to address fully. It should however be noted that faster rates of development are witnessed among counties that are small since they have a lower base and have the growth potential that is greater unlike those with a higher economic base (Gross County Product Report, 2019).

1.2 Research Problem

Economic growth is a universal goal of every entity including county governments. Any factor which can affect the same is therefore a concern for the county governments and so worthy exploring on. Theories have been developed to guide on growth of county governments but the issue seems bigger than can be handled by the existing theories. Whereas Wagner (1980) advised on economy expansion to facilitate better allocation of funds, it looks like putting the cart before the horse, as the interest should be more on the growth side as compared to the allocation. The key issue should be what can expand the

economy as opposed to what can lead to more allocation of resources. Others like public Choice Theory of Budget advises for diversification of revenue sources. This is a good suggestion and with well thought out processes, can to some extend be achieved. It is however, important to note the harsh situations – cattle rustling, drought, famine and insecurity- in some counties and such diversification may be limited.

In Kenya, CRA has been tasked with the responsibility of advising on revenue allocation to counties. They do not have a standard way but uses a formula, which is revised periodically. The periodic revision has exposed the CRA and the formula to political influence as has been evidenced with the stalemate in the formula for the period starting with the 2020/2021 financial year (Wanambisi, 2020). Limitation to 15% of the national budget has also affected the allocation of funds with many insisting on increase in the amounts given to counties. The national government has been adamant on the issue and this has affected the allocations as found by Ayega (2019). The major challenges has been that the process is handled from a political instead of a professional perspective. To meet some standards, the Nairobi County has had to get some allocations from the national government. This is a clear indication that counties cannot survive with the 15% distribution they get from the national government. It also points to the importance of any allocation a county can get from the national government. What is more worrying is that, the county with the most advanced own revenue generation ability and which also gets the highest allocation still falls short, making scholars wonder what would happen to the other counties especially in ASAL regions. This necessitated a research to understand the relationship between national government budget allocations and the county governments' economic growth to advice on the best way forward.

Several past researches have been done to explore the area of budgets and economic growth. In US, Yan (2011) established that counties could be better off if they diversified. This was because they could therefore rely less on the allocations from the national government. The findings are however in US with mature states and therefore may not apply in Kenya whose counties are only about 7 years old. The advice also conflicts with the findings of Bartle, Kriz and Morozov (2011) who found national government allocations to be good boosters of economic situation in local governments. Similar studies in India comparing with China established that local governments were threatened by corruption and fiscal indiscipline in their affairs. This situation interferes with the influence budget allocations would have had in county governments and makes research difficult to establish the connection. These studies are all from advanced economies and relying on their findings expressly would most likely mislead policy makers in Kenya.

In Nigeria, related research has been done on prioritization of sectors to economic development. In a research by Usman and Nurudeen (2010), education was found to boost economic development in the devolved units. Comparing the findings with those of Ogundipe and Lawal (2011) shows that different prioritizations can affect economic growth. The researchers determined that health sector prioritization affected negatively on economic development. The findings do not however advise on the effect of national revenue allocations. This is considered a major deficiency, and therefore needs to be complemented, as the allocations come before the prioritizations hence understanding them better is crucial.

In Kenya, several studies have been done. Mose, Kibet and Kiprop (2019) focused on effect of county government spending while Mohammed and Muturi (2018) focused on county government efficiency in revenue collection. Muturi and Kosen (2013) on the other hand, researched on sectorial budgetary allocation. These studies are not exhaustive and this research sought to compliment the earlier works by answering the question: What is the relationship between national revenue allocation and county economic growth in Kenya?

1.3 Research Objectives

1.3.1 Main Objective

To establish the effect of national revenue allocation on economic growth of county governments in Kenya

1.3.2 Specific Objectives

The specific objectives of this study were to determine the effect of;

- i Development budgets on economic growth of county governments in Kenya.
- ii Fiscal discipline on economic growth of county governments in Kenya.
- iii Economic potential on economic growth of county governments in Kenya.

1.4 Value of the study

The government of Kenya and national policy makers are informed by this research finding in designing and implementation of policies that are meant to enhance the performance of budgeting process meant to disburse funds to the counties.

The county governments and the policy makers at the county level could be informed by this research finding in designing and implementation of policies that are meant to ensure that the funds received from the national government are channeled to the right investments that could ensure optimum growth of the economy. The research also informed them on how to go about best practice especially in execution of their budgets in line with the zero based budgeting requirement in public finance management act.

The findings of this study add to the pool of knowledge that exists in the area of finance and economic development. The results are useful in informing future studies and giving recommendations on the still existing research gaps.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

In this chapter, the theoretical framework, empirical studies and conceptual framework are reviewed.

2.2 Theoretical Review

2.2.1 Wagner Theory of Organic State.

This theory was developed by Wagner in 1890, a German economist and states that economic growth and expenditure are related. Wagner viewed allocation of funds towards economic investment to be depended on economic growth, that as the economy expands, allocation and expenditure of funds also expands. This hypothesis attempts to establish either a positive relationship between allocation of government funds and increase in productivity and / or a unidirectional causality relationship between budget allocation and economic growth.

The law is faulted because of its inherent assumption of viewing the state as separate entity capable of making its decisions ignoring the constituent's populace who in fact can decide against the dictates of the Wagner law. Wagner's theory of Organic state is relevant to this study since it in various ways attempts to explain the relationship between national budget allocation expenditure and economic growth.

2.2.2 Public Choice Theory of Budget

This theory was advanced by Gallagher (1993) which argued that a normal nation is expected to having diverse sources of resources that they may utilize in the financing the nations operation. While the resources are termed to be limited within the developing nations, a lot of finances are required to be channeled to the development programs that can boost the country's economy. With most nations like in Africa taking charge to finance facilities like schools and health, which are critical services, a concern has been on the resource allocation within the government. According to Gallagher as cited by Agarwal (2015), an incentive need to be given to the responsible people in the allocation process so as to ensure fair allocation of national resources.

Based on the concept of market failure where the market conditions seem to have failed in the determination of the market conditions in terms of demand, supply and price. Such failure as per Agarwal (2015) necessitates government intervention through the allocation of national resources. The theory becomes important in the current study as it explains the logic behind the budget allocation and why it has been necessary within the economy.

2.2.3 Rostow-Musgrave Model

The American economist Walt Whitman Rostow established this model in 1960. It states that an economy which is in her early stages of economic growth should spend more to ensure the economy does not collapse. This is because an infant economy experiences a variety of challenges and market failures and the government has the responsibility of cushioning it from collapsing. Investing in health, education, water supply, electricity and infrastructure are necessities that when done properly launches the economy up from the infant stage to the take off stage of economic growth.

This model is criticized and demeaned on the ground that it ignores the contribution of the private sector to economic growth. The critique is because it assumes that the government is the only driver responsible for economic growth (OgbaLikita, 1999). The relevance of this theory to the current study is because the theory suggests the importance of government spending and budget allocation on economic activities especially during and immediately after recession in healing and growing the economy.

2.2.4 Rationale and Feasible Budget Allocation

Nagel (1991) which assumed that the scarce resources in a country should be allocated in a both rationale and feasible ways championed the theory. In the allocation of resources, objectives need to be established first among which economic growth and sustainability are among the key objectives a country may be having. With the theory at first assuming alternative allocations have effects on each sector, it was also agreeable that the budgets where not static and could be adjusted based on felt need.

In the current study, the theory becomes crucial due to its consideration on the relation between budget allocation and economic growth. In the attempt to reconsider the level alternative proportion of each allocation to sectors, the objectives should be closely monitors and the performance indicators reassessed against the initial objectives. Nagel (1991) established that adjustment could be made upon a sensitivity analysis being conducted to see the relative change in one variable and how important it is to the general objective of the economy.

2.3 Determinants of Gross County Product

There are other factors that may be thought to contribute to the county economic growth other than the national government allocation. In order to realize the objectives of the current study, some factors were considered to be relevant to determine the GCP which included amounts of development budgets, fiscal discipline and county economic potential which are reviewed under this section.

2.3.1 National Revenue Allocation

Various scholars at a national level have examined the impact of national budget allocation and public expenditure on economic growth and the results have been without conflicting views. Gregoriou and Ghosh (2008) and Benos (2009), using the same methodology of generalized method of moments had different outcomes. The former found that public spending had a positive significant impact on economic growth in 15 developing countries sampled and the later attributed economic growth among 14 EU states in the long run to infrastructure and human capital.

Lamartina and Zaghini (2008) examined the link between public expenditure and economic growth using Wagner's theory and their finding confirm the argument put forward by Wagner. Szarowská (2012) analyzed the direct link between public spending and output (GDP) in short and long-term for Bulgaria, Czech Republic, Hungary, Romania and Slovakia and investigated if public spending is countercyclical. Her results reject the countercyclical effect of the two variables. Many recent papers for OECD, developing countries, Latin America showed that contrary to the theory, public spending is pro cyclical (Abbott & Jones, 2011). The literature also emphasized the importance of education on growth. We consider that researchers like Barro (1991), Sala-i-Martin et al. (2004), made great contribution to this subject.

2.3.2 Development Budget

In the real operations, counties have been known to have different priorities when it comes to how they utilize their available resources. A great conflict has been observed between the recurrent spending and development investments. According to Cannon and Ali (2018), misallocation of the county resources and high level of recurrent expenditure commitment were among the factors preventing success in counties. Even though every county would like to observe its economy grow through development investments, it is realized that county governments operate with little resources that cannot allow them to invest much due to the recurrent spending that is important for the day to day operations of the counties. In Kenya, it has been noted that counties give little priority to development within the counties. With the report showing that a greater percentage of counties within the nation having zero allocation to development during the 2018/2019 fiscal period (Letoo, 2019). This being a key determinant of the future economic growth among the counties, it was measured using the total county expenditure allocated to development.

2.3.3 Fiscal Discipline

Fiscal discipline has been viewed as the way in which the county governments behave when it comes to the issue of utilizing their disposable resources. With most of the counties expected to create a rapport with other firms that they interact with in their normal operations, many counties have breached this expectation they owe to the third parties. According to Perotti (1996) most of the counties were seen to be misled by the attitude towards budget deficits and with a wanting relationship, it is very hard for the counties to grow in their economies and this may call for some adjustments to be made.

A study by Kerich (2017) established that the financial discipline was completely lacking within the county governments. With the impact being seen within the nation prior to the 2020/2021, budget allocation when most of the counties had pending bills to contractors and other third parties who offer their supplies to the counties. In the current study, fiscal discipline was measured using the amount of outstanding debts within the counties in each fiscal year.

2.3.4 County Economic Potential

The county economic potential looks into the capacity the county has to finance their operations from the internally generated funds. Most of the counties are seen to have little revenue generating projects because they are new entities in the nation. With only the urban counties having initial projects and industries that could generate revenue, recently

agriculture, tourism and mining has boosted other counties within the nation (Cheruiyot, Oketch, Namusonge&Sakwa, 2017).Such projects generate revenue to the counties, and hence leads to the growth of the gross county product, however, it is good to note that different counties have different levels of this potential.

In the current study, the county economic potential was measured using the proportion of the county budget that is financed using the Appropriation-in-Aid account or that is generated from within the county. With the study by Okoth (2019) establishing that many counties have poor revenue collection techniques, counties are expected to develop new and efficient ways of revenue collections to maximize on the level of county operations.

2.4 Empirical Literature Review

Previous studies associated with the effect of national revenue allocation on county economic growth are reviewed. The previous studies reviewed are categorized into international studies, regional studies and local studies. The section then identifies the research gaps based on the empirical review.

2.4.1 International Studies

A study by Yan (2011) which was conducted in the United States seeking to establish the impact of county government diversification of revenues sources within the state. The study which adopted a quantitative study approach found out that the more diverse the counties were far much better off in terms of economic growth. This implies that counties should try to have variant sources of finances to avoid overlying on the national government allocation for their operations as per Yan (2011).

Another study still in the USA context by Bartle, Kriz and Morozov (2011) sought to establish the structure of the local governments funding. From the study findings, it was seen that the county governments performance was continuously being boosted by the state aid far

much but which was being threatened to decline over the future years. This shows that the government allocation was a key concern in the state as its importance was quite crucial to the county governments whose other sources of funds like property taxes were declining. However, the focus of Kenya as a developing country may be different necessitating for the current study to be conducted.

A similar study conducted by Caruana et al. (2018) in the context of the United Kingdom sought the interrelation between the county government operations and the established national standards expectations showed that even though many counties had performed well, the linkage between their functions had not been properly aligned. The results indicates that there is much to be done for the county governments to properly utilize the allocated resources within their disposal.

Another study, which used a comparative approach between the devolution in India and that in China, established that the county governments had been seen to fail to some extent. According to Martinez & Rider (2006), both the two nations were facing the same challenge in devolution with fiscal discipline and poor service delivery at the county levels being the major challenge for counties performance and growth. The study was however limited as the comparison between two nations gave shallow coverage of the issue which the current study gave the necessary focus.

2.4.2 Regional Studies

Ogundipe and Lawal (2011) looked into how healthcare expenditure influences economic growth of the Nigerian economy. This study was carried in the same country the same year as did Bakare and Sanmi (2011) using the same method of analysis. The health service which was among the devolved functions within the state was financed by county governments and as well affected their economic performance. Their results were however different as they

observed that investing in healthcare had a negative effect to the growth of the economy. Their studies however, did not focus on the other underlying conditions, which may have affected the county performance.

Usman and Nurudeen (2010) carried out a study on the impact of government expenditure on the growth of Nigerian economy. They used a co-integration and Error Correction Model (ECM) in their research. They found out that investing in education which was a devolved function in the country affects the economic growth negatively whereas developing and improvement of infrastructure and health leads to expansion of the economy. The study however, focused on as single side of expenditure and failed to consider allocations and internally generated revenues as the current study did.

Benin et.al (2009) analyzed public expenditure and increase in productivity of the agricultural sector in Ghanaian agro-ecological zones. Their findings revealed that investment by the government into provision of public goods and services that enhance agriculture, health, education and infrastructure in rural areas have substantial effect on agricultural productivity, which in turn leads to a better economy. Some of these services like education and health being devolved services implies direct positive growth of the county governments that spend on them.

2.4.3 Local Studies

According to the study made by Mose, Kibet and Kiprop (2019) in the context of Kenya on the effects of the county government spending on the gross county product established that both the recurrent and development expenditure had a positive impact on the county GCP. The study found that the recurrent expenditure had a significant influence while the development expenditure had insignificant influence. However, as the study only focused on the spending side, the current study considered spending, allocation and own collections as well.

Another study made by Mohammed and Muturi (2018) on the factors affecting revenue collection efficiency in county government established that even though electronic collection had achieved efficiency, the taxpayers were not aware of the tax collection system which led to poor collections in the county levels. The current study however, intents to collect information beyond the collections and consider spending and allocation from national government as well.

Muturi and Kosen (2013) looked into the influence of sectorial budgetary allocation on economic growth using log-linear form model in Kenya. This study concentrated on defense, health, education, transport, communication, agriculture and manufacturing sectors. They discovered existence of a long-run positive relation between investing in educational sector which is partially devolved and agriculture which was fully devolved and GDP which translates to GCP growth within the counties. Defense, Health, transport and communication showed an insignificant positive relationship.

It is clear from the above literature that there is a research gap existing in the field of study as different studies have offered diverse results of the aspect of the county allocations from the national government, the pattern of spending, own county collection and how they relate to the county performance. It is in lieu of this research gap that the current study was conducted to establish the existing condition on these variables in the Kenyan context.

2.5 Conceptual Framework

The dependent variable in this study was economic growth while the independent variables were national revenue allocation, exports, interest rates and inflation. A positive or a negative relationship between National revenue allocation and economic growth is expected. Figure

2.1 below illustrates the relationship between the variables.

Fig 2.1 Conceptual Framework



Source: Author (2020)

2.6 Summary of the Literature Review and Research Gap

Various literature reviewed relating to the impact of government expenditure on economic growth across different countries on different continents have revealed conflicting and mixed conclusions. For instance, Maingi (2010) concludes that public resources expenditure influences growth of the economy while Simiyu (2015) concludes that there exists no causal association between public expenditure and economic growth. None of the studies carried out previously was conducted at the county level, which is the major gap that this study aims to fill.

| Author | Focus of | Methodolo | Findings | Knowledg | Focus of | |
|----------|-----------------|--------------|-----------------------|-------------|---------------|--|
| of study | Study | gy | | e Gaps | current | |
| | | | | | study | |
| Yan | Impact of | Quantitativ | Revenues | The | The study | |
| (2011) | revenue | e statistics | diversification aided | specific | looked at | |
| | diversification | | the county | county | how the | |
| | and economic | | governments to grow | governmen | county | |
| | base on | | economically | t growth in | governments | |
| | county | | | GCP was | GCP was | |
| | governments | | | not | affected by | |
| | in US | | | studied. | all the | |
| | | | | | variables | |
| Bartle, | Local | Descriptive | Found that the | The | Re-assessed | |
| Kriz&Mo | government | Analysis | county allocation | condition | the situation | |
| rozov | financial | | was improving | may vary | in Kenya. | |
| (2011) | structure in | | gradually from | in context | | |
| | USA | | national government | of the | | |
| | | | | study | | |
| Caruana | Financial | Descriptive | There was lack of | The study | The study | |
| et al. | sustainability | approach | the integration | did not | looked at the | |
| (2018) | in local | | between the | focus on | issue in | |
| | governments | | allocations and | the impact | Kenya and | |
| | in UK | | spending on the two | on county | impact on | |
| | | | levels of | GCP | GCP. | |
| | | | governance. | | | |
| Martinez | Fiscal | Comparativ | Poor service delivery | The study | The study | |
| & | decentralizati | e analysis | and lack of financial | used a | only focused | |
| Rider(20 | on and | | discipline affected | comparativ | on the | |
| 06) | economic | | the two countries | e approach | condition in | |
| | growth in | | | which | Kenya. | |
| | India and | | | limits | | |
| | China. | | | coverage | | |
| Ogundipe | Effects of | Descriptive | Found heath care | Did not | Focused on | |
| and | heath care | analysis | expenditure affected | consider | both | |
| Lawal | expenditure | | economic growth | other | spending and | |
| (2011) | on economic | | negatively. | underlying | inflows to | |
| | performance | | | factors. | the county's | |
| | | | | | economic | |
| | | | | 0.1 | growth. | |
| Mohamm | Factors | Quantitativ | Found that the | Only | Also focused | |
| ed | Affecting | e and | revenue collection | focused on | on spending | |

 Table 2.6: Summary of the Literature Review and Research Gap

| &Muturi | Revenue | inferential | policy was not clear | revenue | and |
|----------|---------------|-------------|------------------------|-------------|---------------|
| (2018) | Collection | statistics | to taxpayers. | collection | allocation |
| | Efficiency in | | | | |
| | County | | | | |
| | Governments | | | | |
| Kosen& | Impact of | Descriptive | Expenditure on | Focused | Determining |
| Muturi | sectorial | Analysis | education, | on national | the impact of |
| (2013) | budgetary | | agriculture and GDP | governmen | public |
| | allocation on | | affects economic | t sectorial | expenditure |
| | economic | | growth positively in | units | on economic |
| | growth in | | the long run while | | growth of |
| | Kenya | | expenditure on | | county |
| | | | Defense, Health, | | governments |
| | | | transport, and | | in Kenya |
| | | | communication | | |
| | | | showed an | | |
| | | | insignificant positive | | |
| | | | relationship. | | |
| Mose, | The effect of | Descriptive | Found that the | Focused | Focused on |
| Kibet&Ki | county | analysis | recurrent | only on the | both |
| prop | government | | expenditure had a | spending | allocation |
| (2019) | expenditure | | positive significant | side of the | and |
| | on gross | | influence while | counties | collections |
| | county | | development was | | on top of the |
| | product in | | insignificant | | spending |
| | Kenya | | | | |

Source: Author (2020)

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This chapter describes the methodology that was adopted by the researcher in determining the effect of national revenue allocation on county economic growth in Kenya. The chapter is broken down into research design, target population of study, data collection and analysis.

3.2 Research Design

This study, using a panel data set, used correlational research designs. Correlation design was preferred as it gives a clear result as to the direction and magnitude of correlation between the variables under study. Such clarity helped in achieving the study objectives and advising users of the study well. The ccorrelation design was employed to establish the effect of national revenue allocation on counties' economic growth. The design also helped in establishing the influence of financial discipline, development budget and county economic potential on the economic growth of counties.

3.3 Population and Sample

The target population was all the 47 County governments in Kenya. The study was a census since population was small and data was available through secondary sources. Therefore, no sampling was done. The researcher considered this population adequate for establishing the association between national revenue allocation and county economic growth in Kenya.

3.4 Data Collection

Panel secondary data extracted from Kenya National Bureau of Statistics, the Office of Controller of Budget and the Office of the Auditor General was used. The specific data that was obtained comprised of economic growth (real gross county product), yearly county development budgets, and amounts of outstanding debts at financial year-ends, amounts of local revenue collections and the total allocations from the national government. The data was collected over a four-year period from 2015 to 2018. This period was considered adequate to produce an appropriate panel data suitable for regression analysis.

3.5. Diagnostic Tests

The researcher conducted stationarity tests to establish the normality of the data collected. Test of Stationarity is a process of testing the statistical tools such as mean, variance and autocorrelation. Normality usually tests whether collected data is distributed normally around the mean. Normality of the data was tested using the tests for Kurtosis.

Auto-correlation which refers to the measure of the similarity between a particular time series and a lagged value of the same time series over intervals of time that are successive was tested by use of Durbin-Watson statistic. Other tests done were to determine linearity, which was done through use of scatter diagrams with lines of fit, and test for omitted variables, which was done using the Ramsey Reset Test. Interpretations of the tests, was done at a 95% confidence interval.

3.6 Data Analysis

3.6.1 Analytical Model

Inferential techniques such as correlation and regression statistical analysis ware used to test the link between national revenue allocation and county economic growth in Kenya. The regression model that was used is as follows:

$$Y = \beta_0 + \beta_1 X I i t + \beta_2 X 2 i t + \beta_3 X 3 i t + \beta_4 X 4 i t + \varepsilon$$

Y= County economic growth

 X_{1it} = National revenue allocation for county *i* at time *t*

 X_{2it} = Development budget for county *i*at time *t*

 X_{3it} =Fiscal discipline for county *i*at time *t*

 X_{4it} =County economic potential for county *i* at time *t*

$\beta_0 - Model$ Intercept

- $\beta_1 \beta_4 =$ Coefficients of determinations
- ϵ Error term estimate

3.6.2 Measurement of the Variables

The dependent variable is economic growth while the independent variables ware national revenue allocation, interest rate, inflation rate and exports. The variables in the analytical model were measured as described in table 3.1 below.

Table 3.1: Measurement of the Variables

| No. | Variable | Measurement | | |
|----------------------|--|--|--|--|
| Y | Economic growth | Operationalised using the Real Gross County Productfor counties in Kenya | | |
| v | National revenue | Measured by the exchequer allocations from the national | | |
| $\mathbf{\Lambda}_1$ | Allocation | government to the counties. | | |
| X_2 | Development budget Measured by proportion of development budgets in counties | | | |
| v | Fiscal discipline | Measured by the amounts of net outstanding debts at the end of | | |
| Λ3 | | financial years under study | | |
| V | County economic | Measured by the local revenue collection by the county | | |
| Λ4 | potential | governments | | |

3.6.3 Test of Significance

To test the significance of the relationship between national revenue allocation and county economic growth, all the computations were done at 95% confidence interval where a p-value of less than 0.05 was used as an indicator of statistical significance. Analysis of Variance (ANOVA) with a 5% F statistics significance level was used to test the Goodness of fit of the regression model to the data collected.

CHAPTER FOUR: DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Introduction

This chapter highlights the actual activities done in the research and the results of the study. The chapter discloses some key aspects of the research like response rates, a summary of the descriptive statistics of the study variables, validity test results and their implications on the study and the actual research results. The chapter also highlights such other important aspects of the study like correlation analysis and normality of the study variables' data.

4.2 Descriptive Statistics

This study intended to use 188 data points for every variable under study. This is because data was needed for 4 years and there are 47 county governments in Kenya. Due to some data availability challenges in some of the counties, the study was not able to collect 100% data for all variables. However, enough data was collected for analysis and was sufficient to enable drawing of conclusions. The researcher was able to collect 75% of data to do with real gross county product and 99% for the national government allocations to the counties over the years.

Data for development budget allocations was also collected 96% and 91% for the net pending bills over the years. The last set of data was for own revenue collection where 97% of intended data was collected and used in the analysis. The set of data with the least availability was for the real gross product, which was way above the 60% threshold recommended by Fincham (2008). In light of this observation, the data was considered adequate enough for use in predicting the impact of national government allocation on the gross county product in Kenya.

Table 4.1 Response Rate Table

| Variable | Real | National Revenue | Developm | Net pending | Own revenue |
|--------------------|-------------|------------------|------------|-------------|-------------|
| | GCP | allocation | ent budget | bills | collection |
| Data collected | 141 | 187 | 180 | 171 | 183 |
| Unavailable data | 47 | 1 | 8 | 17 | 5 |
| Total | 188 | 188 | 188 | 188 | 188 |
| Response rate (%) | 75% | 99% | 96% | 91% | 97% |
| Source: Author (20 | <i>)20)</i> | | | | |

Data collected indicated that the mean gross county product was 80.8096 billion shillings with a minimum and maximum of 8.569 and 998.16 billion shillings respectively. There was a lot of variation in gross county product within the counties and indicated by a huge standard deviation of 135.4226 billion. In the national government allocations, there was no much variability observed, as the mean allocation was 5.71 billion with a standard deviation of 2.27billion. In the development budget, there was a minimum allocation of Zero shillings and the highest allocation was 24.900 billion. This shows that there is either an improper book keeping so that the minimum allocation was a mistake in disclosure or there are some straining factors in some times that can force a county not allocate anything for development. This is however not expected as it contravenes the requirements in the Public Finance Management Act on allocations between the development and recurrent expenditures. The mean allocation was 3,150M with a standard deviation of 2,390M.

In occurrence of net pending bills, the mean pending bills were 1,240M with a standard deviation of 8,180M. This situation shows a great diversity in financial discipline as also shown in the minimum and maximum amounts, which were -3,350M and 64,700M respectively. The negative pending bill shows great financial discipline, which indicates that the county has enough cash to cover for all pending bills and have a surplus. Own revenue collection has also been observed to vary greatly within the counties and over the years. The mean collection was 735M with a standard deviation of 1.650 billion. The minimum and

maximum collections were zero millions and 11.400 billion respectively. This diversity shows that there is a great variation in the economic potentials of the counties.

Table 4.2 Table for Data Summary Statistics

| Variable | Obs | Mean | Std. Dev. | Min | Max |
|----------------------------------|-----|-----------|-----------|--------|---------|
| Real GCP (MillionsSh) | 141 | 80,809.48 | 135,422.6 | 8,569 | 998,160 |
| National government allocation | 187 | 5,710 | 2,270 | 1,790 | 15,400 |
| (Millions Sh) | | | | | |
| Development Budget (Millions Sh) | 180 | 3,150 | 2,390 | 0 | 24,900 |
| Net pending bills (Millions Sh) | 171 | 1,240 | 8,180 | -3,350 | 64,700 |
| Own revenue collection (Millions | 183 | 735 | 1,650 | 0 | 11,400 |
| Sh) | | | | | |
| Source: Summary test results | | | | | |

4.3 Diagnostic Tests

Data collected was passed through several validity tests to confirm its suitability for regression. The importance of such tests were to make sure the data used was fit for the purpose to enable drawing of valid conclusions. The data was tested for deficiencies like heteroscedasticity, omitted variables, multicollinearity, linearity, and also stationarity. Model misspecification was also tested to ensure the use of the right model.

4.3.1 Multicollinearity test

Multicollinearity in the variables was tested using variance inflation factor. The independent variables were not found to have high values of multicollinearity. The mean VIF was 5.7 while the highest among the variables was 8.42 for own revenue collection. Since the variables were found to have very little multicollinearity, all variables were used in the final regression and none was left out.

Table 4.3 Multicollinearity Test Results

| Variable | VIF | 1/VIF |
|-----------------------------|------|----------|
| Own revenue collection | 8.42 | 0.118814 |
| Net pending bills | 7.86 | 0.127271 |
| National revenue allocation | 3.37 | 0.297114 |
| Development budget | 3.16 | 0.316669 |
| Mean VIF | 5.70 | |
| Source: VIF test results | | |

4.3.2 Test for Omitted Variables

Omitted variables in the study were tested using the Ramsey Reset test. The null hypothesis tested was that the model had no missing variables. Interpreting at a 95% confidence interval, the null hypothesis was rejected and the model was found to have missing variables. The deficiency was not however significant as a focus was on the national government revenue allocation and not an absolute determination of all factors that can influence the growth of gross county products of counties in Kenya.

Table 4.4 Ramsey RESET Test Table

Ramsey RESET test Ho: model has no omitted variables F(3, 114) = 8.57Prob> F = 0.0000 Source: Ramsey RESET test results

4.3.3 Test for Heteroscedasticity

Breush-Pagan test was used to determine heteroscedasticity occurrence in the data. The null hypothesis tested was that, the data was not suffering from heteroscedasticity. The test returned a significant p-value of 0.0005 as gauged by a confidence interval of 95%. This necessitated rejection of the null hypothesis and a conclusion that the data was suffering from

heteroscedasticity. The situation was redeemed through the use of robust standard errors in regression.

Table 4.5Breusch-Pagan Test Results Table

Breusch-Pagan test Ho: Constant variance chi2(1) = 12.03 Prob> chi2 = 0.0005 Source: Breusch-Pagan test results

4.4 Correlation Analysis

Pearson correlation coefficients was used to determine the correlation between all variables in the study. It was established that all variables were positively correlated with each other. The highest correlation was determined to be between real GCP and own revenue collection. This indicates that own revenue collection is a key ingredient in advancing the real GCP for counties in Kenya. This means that administration in all counties in Kenya needs to take measures to ensure there is growth in revenue collection locally. The lowest correlation was observed to be between development budget and the other variables. This shows that development budget may be related to many other variables which are not in the current study.

Table 4.6 Correlation Analysis Results Table

| | Real GCP | National rev. allocation | Development budget | Net pending bills | Own revenue collection |
|-------------------|-------------|--------------------------|-----------------------|-------------------|------------------------|
| Real GCP | 1.0000 | | | | |
| National revenue | 0.5769 | 1.0000 | | | |
| allocation | | | | | |
| Development | 0.5300 | 0.5759 | 1.0000 | | |
| budget | | | | | |
| Net pending bills | 0.9333 | 0.4914 | 0.3524 | 1.0000 | |
| Own revenue | 0.9817 | 0.5493 | 0.3897 | 0.9169 | 1.0000 |
| collection | | | | | |

Source: Pearson correlation coefficient test results

4.3.5 Normality test

Skewness and Kurtosis tests were carried out on the data to determine its normality characteristics. The data was found to be well distributed and so found to be fit for regression and drawing of conclusions. This is because the data was found not to suffer from uneven distribution which would have impacted its fitness for use in regression.

| Variable | Obs | Pr(Skewness) | Pr(Kurtosis) | adj | Prob>chi2 |
|-------------------------------|-----|--------------|--------------|---------|-----------|
| | | | | chi2(2) | |
| Real GCP | 141 | 0.0000 | 0.0000 | | 0.0000 |
| National revenue allocation | 187 | 0.0000 | 0.0002 | 37.36 | 0.0000 |
| Development budget | 180 | 0.0000 | 0.0000 | | 0.0000 |
| Net pending bills | 171 | 0.0000 | 0.0000 | | 0.0000 |
| Own revenue collection | 183 | 0.0000 | 0.0000 | | 0.0000 |
| Source: Normality test result | ts | | | | |

4.3.6: Linearity test

Linearity test was done to ensure that regression was the right method for the data analysis. It was done by plotting graphs of lines of best fit and observing their nature and also the distribution of the scatter diagrams. All variables were found to relate linearly with GCP, which confirmed that the data was fit for regression.



Fig 4.1 Linearity test for net pending bills



Fig 4.2 Linearity test for national revenue allocation



Fig 4.3 Linearity test for development budget



Fig 4.4 Linearity test for own revenue collection

4.3.7 Hausman Test

In order to determine the best model to use and avoiding model misspecification, hausman

test was done.

Table 4.8 Fixed Effects Model Results

| Fixed-effects (within) regression | | | Number of | of obs | = 122 | | |
|-----------------------------------|----------------|---------------|-------------------------|--------|---------------|-----------|--|
| Group variable: County | | | Number of groups $=$ 46 | | | | |
| R-sq: | | | Obs per g | group: | | | |
| within $= 0.4507$ | | | min = | 1 | | | |
| between $= 0.8082$ | | | avg = | 2.7 | | | |
| overall = 0.7989 | | | max = | 3 | | | |
| | | | F(4,72) | = | 14.77 | | |
| $corr(u_i, Xb) = 0.$ | 8383 | | Prob> F | = | 0.0000 | | |
| Real GCP | Coef. | Std. Err. | t | P > t | [95% Conf. Ir | nterval] | |
| National rev | .00000581 | .00000129 | 4.50 | 0.000 | .000003240 | .00000838 | |
| allocation | | | | | | | |
| Development | .00000265 | .00000115 | 2.30 | 0.024 | .000000354 | .00000495 | |
| budget | | | | | | | |
| Net pending | .00000165 | .000000452 | 3.65 | 0.000 | .000000747 | .00000255 | |
| bills | | | | | | | |
| Own rev. | .00000269 | .00000677 | 0.40 | 0.692 | 00001080 | .00001620 | |
| collection | | | | | | | |
| _cons | 38,640.36 | 9,470.099 | 4.08 | 0.000 | 19,762.06 | 57,518.65 | |
| sigma_u 112,928 | .23 | | | | | | |
| sigma_e 7,848.88 | 891 | | | | | | |
| rho .99519251 | (fraction of v | ariance due t | o u_i) | | | | |
| F test that all u_i= | 0: F(45, 72) = | = 22.53Prob> | F = 0.000 |)0 | | | |

Source: Fixed effects regression results

The null hypothesis tested was that random effects model was efficient. The test returned a significant value, which meant that a rejection of the null hypothesis was done. The result was a decision that the fixed effects model was efficient in the study.

Table 4.9 Random Effects Results Table

| Random-effects GI | LS regression | | | Number o | f obs = | 122 | | |
|------------------------|-----------------|----------------|-------|-----------|-------------------------|--------------|--|--|
| Group variable: County | | | | | Number of groups $=$ 46 | | | |
| R-sq: | | | | Obs per g | roup: | | | |
| within = 0.2462 | | | | min = | 1 | | | |
| between $= 0.9722$ | | | | avg = | 2.7 | | | |
| overall = 0.9714 | | | | max = | 3 | | | |
| | | | | chi2(4) | = 1,043.20 | 5 | | |
| $corr(u_i, X) = 0$ (a) | assumed) | | | Prob> chi | 2 = 0.00 | 000 | | |
| Real GCP | Coef. | Std. Err. | Z | P> z | [95% Conf | f. Interval] | | |
| National rev. | .00000762 | .00000137 | 5.58 | 0.000 | .00000494 | .0000103 | | |
| allocation | | | | | | | | |
| Development | .000000818 | .00000137 | 0.60 | 0.551 | 00000187 | .00000350 | | |
| budget | | | | | | | | |
| Net pending bills | .00000376 | .000000456 | 8.26 | 0.000 | .00000287 | .00000466 | | |
| Own rev. | .0000554 | .00000278 | 19.94 | 0.000 | .0000499 | .0000608 | | |
| collection | | | | | | | | |
| _cons | -8,089.681 | 8,116.581 | -1.00 | 0.319 | -23,997.89 | 7,818.526 | | |
| sigma_u 21,838.0 | 61 | | | | | | | |
| sigma_e 7,848.88 | 91 | | | | | | | |
| rho .88560004 (f | raction of vari | ance due to u_ | _i) | | | | | |
| Source: Random e | ffects regressi | on results | | | | | | |

Table 4.10 Hausman Test Results Table

| | Fixed effects | Random effects | Difference | S.E. |
|---------------------------|--------------------|----------------|-------------|------------|
| National rev. allocation | 0.00000581 | 0.00000762 | -0.00000181 | |
| Development budget | 0.00000265 | 0.000000818 | 0.00000184 | • |
| Net pending bills | 0.00000165 | 0.00000376 | -0.00000211 | |
| Own rev. collection | 0.00000269 | .0000554 | 0000527 | 0.00000618 |
| Test: Ho: difference in a | coefficients not s | ystematic | | |
| chi2(4) = 45.92 | | | | |
| Prob>chi2 = 0.0000 | | | | |
| Source: Hausman test re | es ult s | | | |
| | | | | |

4.5 Regression Analysis and Hypotheses Testing

Regression established that indeed the factors considered affects the growth of real GCP in some way. It was established that the factors do account for 79.89% of all the variations in the county GCP in Kenya. This is a substantial effect but considering the fact that GCP is a very important economic measure in every county, the 20.11% change in GCP which is still unaccounted by the variables studied is worth exploring further.

Table 4.11 ANOVA

| Fixed-effects (within) regression | Number of | of obs | = | 122 | |
|-----------------------------------|----------------------|--------|-------|-----|--|
| Group variable: County | Number of groups $=$ | | | | |
| R-sq: | Obs per group: | | | | |
| within $= 0.4507$ | min = | 1 | | | |
| between $= 0.8082$ | avg = | 2.7 | | | |
| overall = 0.7989 | max = | 3 | | | |
| | F(4,72) | = | 14.77 | 7 | |
| $corr(u_i, Xb) = 0.8383$ | Prob> F | = | 0.000 | 0 | |
| Source: Panel regression results | | | | | |

Regression results have established that all factors considered affects GCP positively. The constant for the regression equation has been established as 38,640.36. It has also been established that, among the factors studied, national government allocations to the counties have the highest impact, while net pending bills have the least effect but still positive. The results of the study have also established that national government allocation, development budgets, and net pending bills have a significant effect on GCP as interpreted at a 95% confidence interval while own revenue collection has an insignificant effect.

Table 4.12 Regression Analysis

| Real GCP | Coef. | Std. Err. | t | P > t | [95% Conf. Ir | nterval] |
|----------------------|----------------|-----------------|------|-----------|---------------|-----------|
| National rev | .00000581 | .00000129 | 4.50 | 0.000 | .000003240 | .00000838 |
| allocation | | | | | | |
| Development | .00000265 | .00000115 | 2.30 | 0.024 | .000000354 | .00000495 |
| budget | | | | | | |
| Net pending | .00000165 | .000000452 | 3.65 | 0.000 | .000000747 | .00000255 |
| bills | | | | | | |
| Own rev. | .00000269 | .00000677 | 0.40 | 0.692 | 00001080 | .00001620 |
| collection | | | | | | |
| _cons | 38,640.36 | 9,470.099 | 4.08 | 0.000 | 19,762.06 | 57,518.65 |
| sigma_u 112,928 | 3.23 | | | | | |
| sigma_e 7,848.8 | 891 | | | | | |
| rho .99519251 | (fraction of v | variance due to | u_i) | | | |
| F test that all u_i= | 0: F(45, 72) | = 22.53 | Pro | b > F = 0 | .0000 | |
| Source: Panel reg | gression resu | lts | | | | |

4.6 Discussion of Research Findings

The study aimed at establishing the effect of national government allocation on the county GCP in Kenya. The focus was expanded to three other variables which were own revenue collection, development budget and the amounts of net pending bills. Regression results have established that national government allocations have a positive and significant effect on the county GCP. This study agrees with the findings of Benos (2019) who had based his study in the European Union economies

The other variable studied was the allocations to the development budget. The study established that there was a positive impact in GCP by allocations to development budgets. The effect was also established to be significant. These results therefore indicate that counties need to do proper allocations to development projects to be able to boost their GCP. Misallocations as observed by Cannon and Ali (2018) and Letoo (2019) needs to be avoided as they would impact on their GCP negatively.

Fiscal discipline as measured by the amount of pending bills was also found to have a positive impact on GCP. This is an indication that, regardless of the flouting of the Zero based budgeting by counties in Kenya, the pending bills were resulting from beneficial projects and capital commitments. Whereas it cannot be encouraged that public financial management act guidelines are flouted, more allocations can be done to the counties so that they will have enough money to cover for their capital commitments and be able to pay their suppliers in time. This will prevent the occurrence of pending bills and at the same time boost GCP.

County economic potential was also studied as measured by county local revenue collection. It was established that it had a positive impact on GCP. This means that counties with less collections have not fully exploited their potential and national government should seek measures to enable them exploit it. This will lead to an advancement of the county GCP and the general performance of the whole economy. Regardless of this effect, the study agrees with the findings of Okoth (2019) on deficiency of county measures in collecting their revenue.

The results of the study have also established that there are other factors which affect GCP. This is because the four factors studied affect only 79.89% of the changes in GCP. This shows that there are other factors which account for the remaining 20.11%. they should be determined so as to advise county governments appropriately and boost their chances of making GCP friendly decisions and policies.

CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

In this section of the study, a summary of the research findings, conclusion and recommendation of the study are discussed based on the study objectives. Further, the chapter also focuses on the limitations of the study and suggestions for further researches in the field.

5.2 Summary of Findings

The researcher had the main objective of the study being to establish the effects of the national government allocation on the economic growth of counties as indicated by the real gross county product. In order to realize the research objectives, the study established other variables considered to be relevant which included strategic prioritization by counties, the fiscal discipline of counties, and the county potential for growth. Under the devolution constitution, Kenya has 47 counties that operate independently from each other but with a slight linkage with the national assembly. The data was collected for 4 years giving an expectation of 188 possible data points. The main variables under consideration being the GCP which offered 141 data point translated to 75% which is deemed sufficient response to form a basis for conclusion.

The study established that the mean gross county product for the 47 counties over the years in consideration was 80809 million shillings, with the national budget allocation to each county recording a mean of 5.71 billion Kenya shillings. The development budget which was used to measure prioritization of counties recorded a mean of 3.15 billion shilling, own county collection which measured county potential had a mean of 735 million shillings while the net pending bills was found to have a mean of 1.24 billion. The normality test results indicated that all the variables under consideration where normally distributed with only national

allocation recording a 0.0002 peaked data which is still normally distributed. The autocorrelation indicated that all the variables under consideration where positively related to each other.

From the regression results, it was established that the R²of 0.9727which implied that the gross county product of the counties could be explained by the changes in the other variables under the study up to 97.36%. Further, the regression data established that national revenue allocation affected the GCP in a positively and statistically significant way at a 95% confidence level. Development budget as used to measure the impact of county prioritization was also found to have a positive and significant impact on the county GCP. The results indicated a positive and significant influence brought about by the net pending bill as an indicator for financial discipline on the GCP. However, the results on the county own collection as indicator for county potential was found to have a positive impact on the county GCP but which was established to be statistically insignificant at the 95% confidence level. This implies that the county GCP was influenced by the county revenue allocation by national government, County fiscal discipline and county prioritization in a positive and significant way while county own potential was insignificant but positive.

5.3 Conclusion

From the research findings that found out that the national government allocation to the counties affected the county GCP in a not only positive but also a significant manner, it can be concluded that higher allocation by the national government will boost the performance of counties through gross county product growth. On the fiscal discipline, the study established that the net pending bill also affected the gross county product in a positive and significant manner which leads to the conclusion that the county governments may be benefiting from

credit facilities which triggers more economic activity within the county and which ends up increasing GCP.

With the county prioritization being found to have a positive and significant influence on the county GCP, a conclusion can be made that counties need to make more investment on the development expenditure which pumps money into the economy and results in better gross county product. On the results relating to county potential, even though the results on county own collection impact on the county GCP was positive, it was statistically insignificant. Therefore, a conclusion can be made that the counties own collection was not quite important in the determination of the GCP. This results could be attributed to the fact that to some extent, own revenue collection withdraws money from circulation and hence neutralizes the positive impact brought a bought by county spending.

From the regression results that indicated that the R²adjusted value of 97.27% indicating that the independent variables explain most of the changes in the dependent variable. A conclusion can therefore, be made that most of the changes in the county GCP has been as an influence of county allocations from the national government, the county fiscal discipline, county prioritization and county own potential. Therefore counties should work towards promoting the performance of their GCP through the adjustment of the above variables in a positive direction so as to affect the GCP positively.

5.4 Recommendations

From the positive influence that has been established between the national government allocation to the counties and the county real gross county product, the researcher recommends that the authorities charged with the role of policy making regarding allocation of county revenues should consider maximizing on the allocation given to counties so as to boost their level of performance in terms of GCP. In terms of county prioritization, the study recommends that counties should be encouraged to devote a constant proportion of their budget towards the development projects and provide guidelines of their implementation to ensure that greater percentage of these spending remains with the residents of the same county.

On the fiscal discipline, which was expected to be having a negative impact on the county GCP was found to have a positive impact. Therefore, the study recommends that the county can still operate with the credit terms as it pumps in more money to the county economy. However, the county governments should be cautious on over borrowing as this may strain future county reputation and limit them from performing in the future due to insecurity of credit providers. The study also recommends that a balance should be achieved in the county own collection. As the county requires the finances for their operations, it is perceived as having withdrawing effect which makes the county economies less active. Therefore, all the stakeholders in the county government policy making are encouraged to make active policies that ensure the county economic activities are boosted and which in return ends up resulting to better performance as per the results for the control variables.

5.5 Limitations of the Study

The study which was conducted in the county governments of Kenya faced some challenges based on the fact that county government have been new in Kenya as they were introduced in the year 2013. This means that the data for the current study was only limited to the few years as opposed to other industries where data can be available for as long as even 3 decades. Also as the study relied upon secondary data and which is published in the audited format by the auditor general office, the counties where found to be having challenges on meeting the requirements for publication. With most of the counties getting either disclaimer opinion or adverse opinion in the first years of reporting ended up questioning the validity of such data.

The study was also limited in that there are other factors that may have also contributed to the good or poor performance of the county GCP and whose data is not easy to collect. With some of the counties experiencing the misuse of power by the bosses as evident in different occasions of whistle blowing and even charging of retired governors, it is a clear indication that something may not be okay with the utilization of the county funds.

5.6 Suggestions for Further Research

The researcher will suggest that future studies on the subject of county governments to be encouraged. As the current study measured that prioritization of county governments using the development expenditure approach, another study can be conducted using the recurrent expenditure approach and establish if the same results will be established. Again, bearing the fact that county governments in Kenya are just new, further researches need to be done from countries that have properly managed counties and which have operated for more than 10 years.

Also further investigation need to be done on the county governments to establish the extent to which the county funds have been managed. Based on a few counties that have experienced constant struggles either on money allocation in the county assemblies or the counties that have been having attempts for impeachments of the county governors, future studies need to be conducted to establish what may be the main cause of these unrest. Further researches can also be done lagging the variables studied instead of assuming a linear relationship.

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APPENDICES

| ppen | Appendin I Duta Concerton Sheet | | | | | | | | |
|------|---------------------------------|---------------------|-------------|-------------|---------------|--|--|--|--|
| Year | National Budget | Gross County | Net pending | Development | Local revenue | | | | |
| | Allocation | Product | bills | budget | collection | | | | |
| 2015 | | | | | | | | | |
| 2016 | | | | | | | | | |
| 2017 | | | | | | | | | |
| 2018 | | | | | | | | | |

Appendix I: Data Collection Sheet