EFFECT OF COUNTY GOVERNMENT REVENUE SOURCES ON GROSS COUNTY PRODUCT LEVELS IN KENYA

BY

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DECLARATION

Declaration by Candidate

This thesis is my original work and has not been presented for a degree in any other university.

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DEDICATION

This research is dedicated to my family members for their relentless support, motivation and encouragement that brought me this far.

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I am grateful to the Almighty God for His favor and protection during my studies. May

His name be exalted forever for bringing us this far.

ABSTRACT

Devolution of government functions is a critical strategy for promoting economic growth in a country. Devolution ensures that public services are delivered in an efficient and well-coordinated manner. Despite the role of devolution in promoting economic growth and development, Kenya's economic growth is generally sluggish. Kenya has one of the world's highest levels of income inequality, with a disproportionately low proportion of Kenyans having access to healthcare and education. This means the majority of citizenry does not contribute or have minimal contribution to the national cake inform gross county product and National GDP. Despite the implementation of devolved system of governance in Kenya and the subsequent establishment of county revenue allocation which distributes revenues to the counties through various mechanisms, there still exist disparities in the rate and level of Gross county products among the 47 counties. The effect of county revenue and expenditure sources on economic expansion, in particular, has not been thoroughly investigated. This study therefore sought to investigate the relationship between different county revenue sources and gross county product in Kenya. The study specifically sought to investigate the effect of county equitable share, own source revenue, national government conditional grants and development partners conditional grants on gross county product in Kenya. The study was anchored on the Fiscal Decentralization and New Growth Theory. Longitudinal research design approach was adopted. Panel secondary data was used spanning from the period 2013-2021. Some of the tests that were carried out include; stationarity, normality, heteroscedasticity, multicollinearity and serial correlation. Data was analyzed using STATA and results were presented in form of descriptive and inferential statistics. Hausman test results suggested a fixed effect model was appropriate over random effect model. The R^2 was 67.82 percent. The study found a positive and significant effect of equitable share (β_1 =.9297, p-value<.01), own source revenue (β_2=.1624, p-value<.01) and development partners conditional grants (β_4=.0478, p-value<.01) on the gross county product. From the analysis, the study recommends the national government should reformulate the equitable share formula to increase more resources to the counties. Further, to boost their resource base the individual county governments should also improve their own revenue generation methods and increase the effectiveness of their collecting efforts. They should also seek out for more development partners. Since the study focused on the effect of county sources of revenue on gross county product, future studies should focus on the effect of these various revenue sources on county poverty index and sectorial development such as; agriculture, infrastructure, manufacturing and health.

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ABBREVIATIONS AND ACRONYMS

BPS   Budget Policy Statement

CRA   Commission for Revenue Allocation

CSFP   County Strategy Fiscal Paper

CoK   The Constitution of Kenya 2010

PFM Act   Public Finance Management Act

FCTs   Fiscal capacity transfers

FD   Fiscal Decentralization

GDP   Gross Domestic Product

GCP   Gross County Product

LGES   Local Government Equitable Share

KNBS   Kenya National Bureau of Statistics

IMF   International Monetary Fund

OSR   Own Source Revenue

OECD   Organization for Economic Cooperation and Development

VECM   Vector Error Correction Model

VIF   Variance Inflation Factor

OPERATIONAL DEFINITION OF TERMS

Aggregate county own source revenues: Aggregate county own source revenues refer to the total amount of revenue raised and generated internally by ALL 47 counties in Kenya in one fiscal year through taxes, fees, user charges, fines, and other county diverse revenue streams (Kibigo, 2021).

County Government Revenue Sources: These are the different sources in which the county governments get and generate revenues used in both recurrent and development functions. County governments in Kenya receive revenue from the national government, generate revenue locally, and receive revenue from external sources (Karimi, Maina, & Kinyua, 2017).

Development Partners Conditional Grants: These are grants made to counties by donors and other development partners such as the World Bank, WHO, and USAID for specific types of projects such as health, infrastructure, and water. The funds are intended to ensure that funds are spent in ways that benefit both levels of government. Conditional grants may be made directly to counties by donors in Kenya. (Garoni, Stoykov, & Yilmaz, 2022)

Equitable Share of Revenues: Refers to the unconditional allocation of national revenues for both county and national governments. As a result, neither level of government has any restrictions on using these revenues to offset their budgetary responsibilities (Reschovsky, 2003).

National Government Conditional Grants: These are revenue for recipient sub-national governments, and as such, they are held accountable for delivering on specific national priorities where the equitable share of revenues is not achieving such priorities. In this study, conditional grants refer to revenues received by county governments from the national government with restrictions on how they will be spent (Diokno-Sicat, Mariano, Castillo, & Maddawin, 2022).

Own source revenues: Own-source revenue is the revenue raised by a sub-national government through the collection of taxes, fees, and user charges within the sub-national government's specified, legal geographical coverage. County own source revenues are thus the revenues collected by counties in one year from taxes, fees, and user charges that fall squarely within the purview of Kenyan county governments (Sridhar & Ravi, 2022).

CHAPTER ONE

INTRODUCTION

1.1 Overview

The primary purposes for the study are highlighted in this chapter. These will comprise the study's background, problem statement, research objectives, scope, significance and justification of the study.

1.2 Background of the Study

1.2.1 Global Overview of Devolution and Economic Growth

The process of global devolution is varied and intricate. From the most federally decentralized countries, like Spain, Canada, and Germany, to the least federally decentralized nations, like Mexico and France, many different federalism systems have been used through devolution initiatives around the realm (Cole et al., 1999). As a result, comprehending devolution is extremely difficult (Cole et al., 1999; IMF, 2016). Increased transfers of economic resources and political power from the state to the subnational or local government are part of the global trend toward federalization, which is motivated by sub-national legitimacy (Cole et al., 1999; Maku & Olukayode, 2009). Sub-national legitimacy typically has cultural, political, social, tribal, religious, historical, and economic basis, just like in previous waves of devolution (Lessmann, 2009). The first groups to predicate the validity of devolution on geographic and economic disparities were the Northern Italian Leagues and regionalist separatist parties in Spain (Keating, 1999; Ezcurra & Rodrguez-Pose, 2010).

Africa exhibits impressive institutional decentralization inventeveness and a range of fiscal decentralization systems of administration. For instance, Nigeria just passed a new constitution that increases the authority of subnational governments. Nigeria was

the first and only federal state in Africa. South Africa and Ethiopia are the two other nations that adopt a quasifederal framework structure (Yemek, 2005). Rural communities in Africa are increasingly gaining more attention than metropolitan ones due to decentralization initiatives (Brosio, 2000; Lessmann, 2009; Agbonkhese & Asekome, 2014; IMF, 2016; KIPPRA, 2016). The majority of African nations, including Ethiopia, Ghana, Kenya, Mali, and Rwanda have fiscal decentralization as a response of rising demands for more state autonomy and just and equal economic distribution from various parts of the country. IMF, Yemek, 2005.

The amount a devolved unit can spend depends on its capacity to generate its own income, borrow on the local market, receive intergovernmental transfers, and draw in both domestic and foreign private investors (Krugman, 1994). According to the median voter theory, local government representatives select the budget level that the median voter prefers (Alm & Embaye, 2010). Therefore, it is anticipated that the impact of devolved expenditure will differ from one country to another depending on the decentralization system in place, the available devolved budget, the degree of economic progress, the degree of political progress, the social structure, and the governance structure in place (Brosio, 2000; Alm & Embaye, 2010).

1.2.2 Devolution and Economic Growth Overview in Kenya

According to Nzau (2014) the Majimbo system and the sessional report No. 10 from 1965, titled African Socialism and its application to planning in Kenya, are two important early examples of fiscal decentralization. The four main concepts of decentralization include; budgetary obligations, revenue distribution, intergovernmental fiscal transfers, and borrowing by local governments. A new constitution for Kenya was drafted and adopted in 2010, and it includes provisions for

fiscal decentralization. Fiscal decentralization previously operated at the local government level before the nation prepared a new constitution. The Local Authority Act, Cap. 265 of Kenyan legislation, used to govern local authorities. Because of this Act, the Local Authority Transfer Fund was created (LATF).

In addition to LATF, other funds were created in accordance with various statutes and are overseen by various government agencies. These include, among others, the Rural Electrification Programme Fund (REPF), Constituency Development Fund (CDF), Constituency Education Bursary Fund (CEBF), Free Primary Education Fund (FPEF), and Roads Maintenance Levy Fund (RMLF).

Kenya has three primary frameworks that enable fiscal decentralization. These include the Special Rural Development Program (SRDP), the Rural Development Fund, and the District Focus for Rural Development (Menon, Macharia, & Mutero, 2008). The 1974 establishment of the Rural Development Fund (RDF) was a good fit for decentralized planning.

Since Kenya's independence, fiscal decentralization has existed there, but on a small scale because it was not enshrined in the constitution. The territories that were once known as provinces were given a great deal of status and authority during this time under the Majimbo system. The system had granted local governments the ability to levy taxes and given them control over the upkeep of minor roads, schools, and health facilities (Chitere & Ireri, 2008). The administration exhibited its dedication to local planning and development management by establishing development committees at the district and provincial levels in order to prevent any problems brought on by the departure from the Majimbo system (Francis, 2015).

In order to address the then alarming unemployment and poverty rates in rural areas, the Special Rural Development Programme (SRDP) was formed in 1971. The National Rural Development Body was established by a central committee that oversaw the SRDP and was handled by the Ministry of Finance (NRDC). The district and provincial development committees were used by the NRDC. Decentralized planning and the creation of district planning systems were both made possible by SRDP. District Development Committees (DDCs) and the Rural Development Fund were also established as a result (Nzau, 2014).

The District Development Officer (DDO) position was created in the public service as a result of the DFRD's creation in 1983. The District Development Committees (DDCs) were established as a result of DFRD, which also stressed the significance of making the district the primary planning unit. Up until 2012, when county governments started operating, the DFRD served as the primary planning, budgeting, and finance framework at the municipal, state, and federal levels. Although some of the devolved funds, like CDF, are still controlled at the constituency level, the focus of development is gradually shifting from the districts and constituencies to the counties.

According to the Ministry of Local Government (2004), local governments were unable to meet their financial obligations under the budget, making intergovernmental fiscal transfers essential to cover the shortfall. As a result, the central government created the Road Maintenance Levy Fund (RMLF) and local Authority Transfer Fund (LATF), two significant fiscal transfer programs. Along with this, the government also established funds for constituency development, free primary education, HIV/AIDS research, constituency education bursaries, rural electrification, and poverty eradication (Mbatha, 2020).

The Local Authority Transfer Act No. 8 of 1998 created the Local Authority Transfer fund. In its first year of operation (FY 1999/2000), the LATF was initially capitalized with 2% of the national income tax; but, as required by the LATF Act, it now receives 5% of the national income tax (Republic of Kenya-LATF Annual Report -2003/2004). According to the LATF Act, 5% of National Income Tax must go to LATF, of which 0.5% must go to cover fund management expenses. The distribution of LATF to local authorities previously followed an open and unbiased formula. The method used population size as a criterion for distributing cash to local governments (Ongong'a Otieno, Odundo, & Rambo, 2014).

In August 2010, Kenya promulgated a new constitution that established a new two-tiered form of government, the National and County Governments. According to the Kenyan Constitution of 2010, there are 47 County Governments, each of which is listed by name but whose limits are not specified. Kangu (2015) claims that the names of the 47 counties stated by name in the First schedule of the Constitution are the same as the names of the 41 districts specified in the independence Constitution, as revised and expanded to 47 districts by the 1992 Districts and Provinces Act. Therefore, the 47 County Governments listed in the fourth schedule of the Constitution will be the main subject of this study. The focus is on counties since they are the new subnational governments that the Constitution established and because it has given them authority over resource mobilization.

According to the Kenyan Constitution, devolution means sharing political, administrative, and financial responsibilities between the National and County Governments. Devolution as a strategy for achieving regional equality in impoverished areas is strongly supported by the case of geographic or regional inequalities in Kenya.

The Kenyan Constitution of 2010 has given the government a chance and fresh impetus to refocus and reengineer its efforts on fairness and poverty reduction. To achieve this, a good legislative framework that considers equity in resource allocation must be created. This is due to the constitution's weak self-enforcement. There are 47 counties in Kenya, which serves as the unit of devolution (Cannon & Ali, 2018).

The criteria for allocating funds at the county level include, but are not limited to, geographic size, population density, equity in amounts per county, levels of county development, quantity and quality of infrastructure in the county, quantity of natural resources in a county, and how much is or can be produced by a county (Busolo & Ngigi, 2020). In most cases, some counties are better off financially or have the capacity to produce more resources than others. The National Government's responsibility is to take care to guarantee that resources are distributed fairly so that each county will receive an amount that will allow it to meet both its population's demands and budgetary estimates. Traditionally, federal states like the USA, Ethiopia, Canada, Ghana, and South Africa had higher rates of fiscal decentralization (Etienne, 2005) (Yemek, 2005; IEA, 2010; World Bank, 2014; SID, 2017).

Kenya's portion of the devolved budget in 2014 (20% of the total budget) was comparable to regional spending levels; for example, in Tanzania and Uganda, devolved expenditure accounted for 22% and 20% of the whole budget, respectively, while in Ethiopia, it was roughly 46% of the total budget (GoK, 2015; SID, 2017).

Kenya's economy is expected to develop at an average rate of 5-6% over the coming years. However, there has been an increase in the budget deficit (to 8.8 percent in 2016–17), in part because of a drought and presidential election-related spending constraints as well as domestic income deficits. As a result, Kenyan authorities have committed to

taking a variety of corrective measures, such as finding new ways to increase the tax base and improving county-level revenue performance. In Kenya, local authorities had historically been given control over own-source revenue (OSR) at the local level through the levying of property taxes and the granting of business permits.

1.2.3 Gross county product perspective

The recent global initiative toward federalized spending has been gradually justified on the grounds that the devolution of resources to sub-national governments is likely to result in greater efficiency in the delivery of public goods and services and, as a result, will stimulate economic activity at devolved units (Martinez-Vasquez & McNab, 2006; Mutie, 2014; World Bank, 2016). The International Monetary Fund (IMF) and World Bank (WB), which view expenditure decentralization as a major component of their economic growth and poverty eradication strategies, support the Devolution trend in developing countries. (IMF, 2016; World Bank, 2016).

The scope, growth, and character of the rising economic activity at the County level as well as the expanding value of the tax/fee base have created concerns that own-source revenues are not proportionate to these factors. Therefore, a new draft policy and County Revenue Bill (2018) seek to increase the County revenue base, strengthen the administrative ability of counties to raise their own revenues, and provide a regulating framework for county imposition and variation of rates, in line with the goals of the national tax system and the economy. Through the inclusion of an OSR performance element in the central allocation formula, the Commission on Revenue Allocation also seeks to increase county incentives to increase own-source revenues.

Through the inclusion of an OSR performance element in the central allocation formula, the Commission on Revenue Allocation also seeks to strengthen incentives for counties

to increase own-source income. In order to better inform the draft policy and reform of the CRA formula, it is necessary to have a better understanding of the potential revenues available at the county level as well as the obstacles or opportunities that counties may face in order to realize more of that potential. This will allow counties to benefit from devolution, create efficiencies from the consolidation of local government structures, and better fulfill their mandates for decentralized service delivery through more sustainable financial practices.

1.2.4 National Government Revenue Sources Perspective

Government revenue, according to Chisholm (1911), is the sum of money that a government receives. Exports and imports, non-taxable sources like the income of government-owned corporations, central bank revenue, and capital receipts in the form of external loans and debts from international financial institutions are just a few examples of the sources from which the government receives its income. It also receives income from central bank operations. It serves the nation's interests. Governments use tax income to improve the nation's infrastructure, including its roads, housing, and schools. The funds that the government collects are used to fund the services that are offered to the populace.

1.2.5 County Revenue Sources Overview

According to Kangu (2015), County Governments established under Kenya's 2010 Constitution are intended to have financial autonomy in two ways: access to sufficient funding from their own sources and transfers from national tax revenues, as well as the freedom to set their own budgets and budgetary priorities through the county fiscal strategy paper (CFSP). The county government receives funding from the four primary sources according to Kenya's National Treasury (2018): tax income, including property

taxes, value added tax, corporate taxes, and pay as you earn, non-tax revenue such Social security contributions, international grants from other nations' governments and non-governmental organizations, and loans, both local and foreign. In accordance with Article 206 of the Kenyan Constitution, a consolidated fund will be formed through which all funds raised or received by the national government or on its behalf will be disbursed. That indicates that all funds received from government sources must be placed in the consolidated fund account (Kiambi, Walubaka, Munene & Nguta, 2022).

County governments must have "sustainable sources of resources to enable them to administer and deliver services effectively," according to Article 175(b) of Kenya's 2010 Constitution. The Constitution of Kenya (2010) Articles 202(1) and 203(2) define the funding sources for the defined County Governments as follows: an equitable share of at least 15 percent of the most recent audited national revenue raised; additional conditional and unconditional grants from the national government's share of revenue; an equalization fund based on half of one percent of the national revenue raised; local revenues in the form of taxes, charges, and fees; and loans and other financial assistance.

The County Governments may raise own source revenue from charging property rates, entertainment taxes, and any other taxes that they are authorized to impose by an Act of Parliament, according to Article 209(3) of the Kenyan Constitution of 2010. The Constitution's financial model and one of the public finance principles laid out in Article 201(b) of the Constitution of Kenya (2010) serve as the foundation for the concept of the equitable share as it is described in Article 202 of the Constitution (ii). According to (Kangu 2015), the equitable share is a right of every government and not a voluntary gift from the national government to the County Governments. It is also a right that

may be enforced in court. Own source income (OSR) are defined as revenues created by one level of government, in this case the County Government, through property taxes, entertainment taxes, fees, and charges for the services they provide. This definition is found in Article 209 of the Kenyan Constitution (2010).

County governments in Kenya can collect revenue from own source revenue by administering taxes (Wanjiru, Maina, Onsomu, & Stewart-Wilson, 2019). According to a study by Agunbiade & Idebi (2020), taxes are mandatory government fees for which there is no direct benefit. Taxes do not always require the use of or a direct profit from products, regulations, or services. Instead, taxes are unpaid payments that are primarily used to fund the government. Property taxes and entertainment taxes are two examples of taxes charged by the county governments in Kenya.

In addition to taxes, county governments collect revenue from charges, fees and licenses (Whitaker, 2020). Charges and fees are payments for services rendered by the county government or a fee to access a public space like a park, market, hospital, or parking lot. User fees and costs may be based on how often a service is used, or they may apply to heavy or intermittent use of a service, like water. User fees and charges are mostly used to increase economic efficiency rather than generate income. Licenses are charges related to permission given to an entity to carry out a specific action and are primarily issued for regulatory purposes. Licenses for businesses and outdoor advertising are two examples of source of revenue by county governments in Kenya.
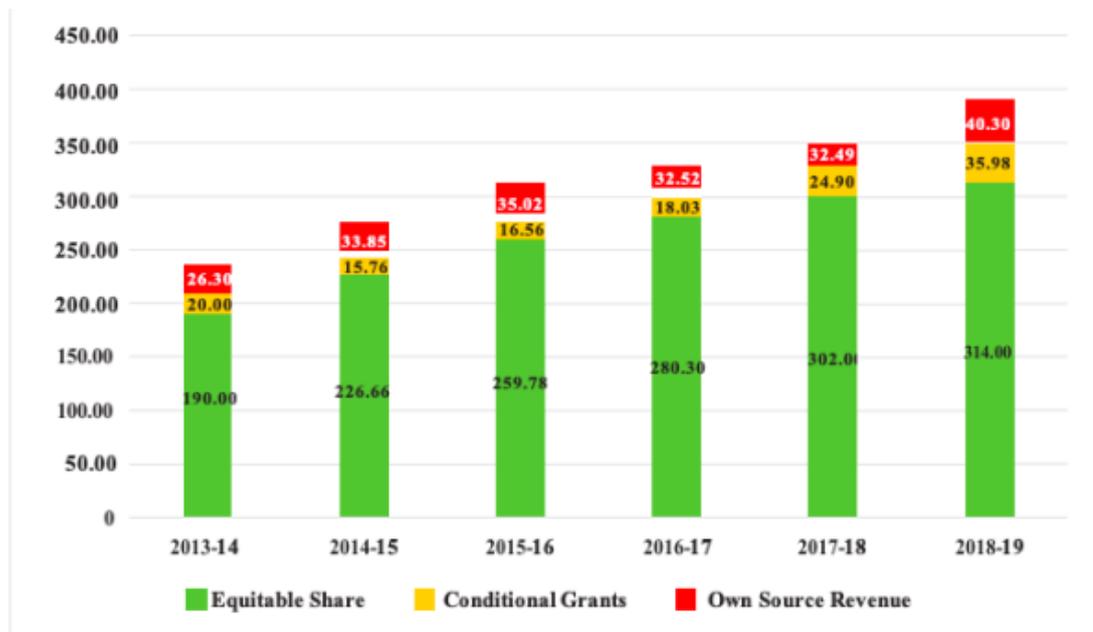
Figure 1.1: CRA County equitable share, conditional grants and own source revenue.
Source: County Own Source Revenue Report.

The table above gives a summary of the commission of revenue allocation own source revenue in Kenya in the year 2019. The table also outlines the conditional grants and equitable revenue share.

1.3 Problem Statement

Devolution of government functions is an important strategy for promoting a country's economic growth and development. Devolution ensures that public services are delivered in an efficient and well-coordinated manner. Further, decentralization might also lead to reduced income disparity in a situation where government represents at least 20% share of economy (Sepulveda and Martinez-Vazquez, 2011). Edoun and Jahed (2009) found out that decentralization in South Africa effectively promotes local economic development. Several studies (Bagaka, 2008; Mutie, 2014; Maingi, 2017; Muguro, 2017; Mwiathi, 2017) have attempted to investigate the channels through which other forms of fiscal devolution, such as CDF and LATF, can influence economic

growth. The empirical findings do not provide a conclusive conclusion on the relationship between devolved government sources of revenue and county economic growth, specifically the impact of county revenue sources on county gross domestic product.

Further, the national government distributes significant sums of money to county governments each year through CRA for infrastructure development, health care services, education, agriculture, overall administration, and other devolved functions. Despite these devolved revenues and expenditure increases, Kenya's CGP growth has been lower than yearly estimated targets (6.2%), widening income inequalities, increasing growth volatility, and rising poverty rates (KIPPRA, 2016; World Bank, 2016; KNBS, 2019). This funds' poor performance has cast doubt on whether continued increases in county spending allocation can provide a solid foundation for the country's economic expansion while also enduring economic growth volatility. This begs the question of whether county government spending is a viable fiscal policy tool for stimulating economic growth in the 47 counties.

It is therefore clear that despite the role of devolution in economic growth and development, Kenya's economic growth is generally poor. The vast majority of Kenyans are impoverished. Kenya has one of the world's highest levels of income inequality, with a disproportionately low proportion of Kenyans having access to healthcare and education (Omondi, 2014). This means the majority of citizenry don't contribute or have minimal contribution to the national cake inform of CGP and National GDP.

Although the implementation of devolved system of governance in Kenya and the subsequent establishment of CRA which distributes revenues to the counties through

various mechanisms, there still exist disparities in the rate and level of Gross county products among the 47 counties. Many of the causes of the disparity in county growth over time are unknown. The effect of county revenue and expenditure sources on economic expansion, in particular, has not been thoroughly investigated. Studies such as (Maingi, 2017; Nzau, 2014) have attempted to investigate the channels through which various forms of fiscal decentralization affect Kenyan economic growth. According to these studies, the effects of spending on growth appear to be inconclusive, with ot hers providing mixed results.

According to empirical studies, the effects of county revenue and expenditure components on economic growth appear to be mixed. Regardless of this ambiguity, economic theory suggests that government spending stimulates economic growth. Despite increased county and national spending, Kenya's economic growth has been volatile. This study was conducted against this backdrop to examine empirically the effect of county revenue sources such as; equitable share, national government conditional grant, development partners' conditional grant and own source revenue on gross county product in Kenyan counties using panel data from 2013 to 2021.

1.4 Objectives of the study

1.4.1 General Objectives of the study

The general objective of this study was to determine the effects of county revenue sources on gross county product in Kenya.

1.4.2 Specific Objectives

The study was guided by the following specific objectives:

i. To evaluate the effect of equitable share revenue on gross county product in Kenya.

ii. To examine the effect of own source revenue on gross county product in Kenya.

iii. To establish the effect of national government conditional grants on gross county product in Kenya.

iv. To determine the effect of development partners conditional grants on gross county product in Kenya.

1.5 Research Hypotheses

The study sought to test the following null hypotheses:

H_{01}: There is no significant relationship between equitable share revenue and gross county product in Kenya.

H_{02}: There is no significant relationship between own source revenue and gross county product in Kenya.

H_{03}: There is no significant relationship between national government conditional grants sources and gross county product in Kenya.

H_{04}: There is no significant relationship between development partners' conditional grants sources and gross county product in Kenya.

1.6 Scope of the Study

The study was restricted to the Kenyan economy and in particular the 47 county governments of Kenya. The devolved units of concern in this study was the county governments. The study specifically addressed the issues of county own source revenue, equitable revenue, conditional grants, unconditional grants and gross county product. Data employed was strictly secondary data. The aim of this study to the Kenyan county governments will be to help the counties optimally achieve sustainable gross county product growth through solid and sound policy decisions in implementations of national government resources distribution formula, own sources

revenue generation and development partners sourcing for sustainable economic growth.

1.7 Significance of the Study

This study will help the county government get insights in their attempt to grow the gross county product. This will therefore help the government's quest of achieving sustainable economic growth in the county economic agenda. This study will aid the national government make optimal decisions in their routine business activities of developing the budget policy statement that set the priorities of both the national and county governments on matters concerning development.

The research can be of great significance to the commission revenue allocation, as it enables them formulate clear procedures, formulas and guidelines of sharing the equitable revenue between the national government and the county governments and also among the 47 county governments in Kenya. The study can be useful to academicians and researchers doing research in related area as the research will enable them to examine the impact of county revenue sources and gross county product. The study will serve as good grounds for theory development which will give insight that will be useful in relation mechanism of raising revenue from county governments and each category of revenue affects the county gross domestic product. This will be a useful resource which will be beneficial to policy makers, the government and other interested stakeholders.

1.8 The Justification of the Study

There is a critical need to build an acceptable framework that will serve as a reference point in order to solve the concerns of county revenue sources and gross county product. To implement effective policies that will solve these challenges, it is critical to first

understand the connection between county revenue sources and gross county product, as well as the targets set out in the county fiscal strategy papers. It's also crucial to comprehend how county revenue sources affect the social, economic and political environment in the county governments in Kenya. This research will be used as a guide for policymakers in Kenya who are developing formulas for equitable share of revenue between national and county governments and also among county governments. It's especially essential for anyone interested in the interaction between county revenue sources and gross county product. Finally, this research will serve as a solid foundation for future research.

CHAPTER TWO

LITERATURE REVIEW

2.1 Overview

This chapter discusses the terminologies used in this study. Gross county product, equitable share, national government conditional grants, development partners conditional grants and own source revenue are examples of such concepts. This chapter further covers the theoretical framework on which the study is based, empirical literature, the research gap identified after reviewing the empirical literature, and the conceptual framework used in the study.

2.2 Concept of Gross County Product

The net value of goods and services produced within the boundaries of a specific county during a specific period is known as the Gross County Product. In other words, it is a measure of how much each county contributes to national GDP and can be conceptually interpreted as County GDP (KNBS, 2019). Gross County Product (GCP) informs Kenyan county performance (Ocharo, 2019). According to Mose, Kibet, and Kiprop (2019), Gross County Product is the total value of output goods and services produced in the county economy. Real GCP is the most accurate measure of growth. It eliminates the impact of inflation. According to Business Dictionary (2017), performance is the achievement of predetermined goals while taking into account the current level of comprehensiveness, momentum, cost, and accuracy. Furthermore, County Governments' actual periodic performance reflects monetary output. The performance of the county government can be assessed by comparing the actual results obtained to the targets and goals expressed in monetary terms. The performance of county governments is measured through infrastructure development increment, foreign direct investment, monitoring and evaluation reports, and county gross government product,

which are some of the measures used in measuring the economic counties in Kenya (Kipkirui, 2020).

The universal push for devolution has been increasingly justified on the grounds that greater transfers of resources to subnational governments will result in greater efficiency in the provision of public goods and accelerate development (Martinez-Vazquez, McNab, & Everhart, 2005) and IMF, (2016). Furthermore, many national and international studies on the relationship between spending and economic expansion have been conducted, for example, (Kakar, 2011; Kimaro, Keong, & Sea, 2017).

Many of the causes of the disparity in county growth over time are unknown. The impact of county spending on economic growth, in particular, has not been thoroughly investigated. Studies such as (Maingi, 2017; Nzau, 2014) have attempted to investigate the channels through which various forms of fiscal decentralization can affect Kenyan growth. According to these studies, the effects of spending on growth appear to be inconclusive, with others providing mixed results. The primary goal of Gross County Product (GCP) estimates is to shed light on the relative size and structure of Kenya's economy for each county. The estimates contribute significantly to economic growth information and aid in county economic planning and decision making (KNBS, 2019).

The Vision 2030 economic pillar aims to maintain 10% annual economic growth. Kenya's economic growth rate averaged 5.6% between 2013 and 2017, compared to a 4.7% growth rate average between 2008 and 2012. According to the review, the vision 2030 economic growth target remains a pipe dream. The difficulties encountered in implementing devolution, such as resource leakages, duplication of mandates between counties and the national government, and low absorption rates, can be attributed to low economic growth rates (Kenya National Treasury, 2018).

Despite the fact that the amount of resources allocated to county government functions in Kenya has increased over time, growth has been erratic across the counties from 2014 to 2017. During the years 2013 to 2017, the counties contributed an average of 2.1 percent to GDP growth, with a standard deviation of 3.2 percent (KNBS, 2019). Contribution of counties to national output is a field that requires a clear focus for the country to realize its economic growth targets.

Despite their small contribution to the national economy, some counties have demonstrated a high potential for growth in recent years. They have also demonstrated the potential to catch up with the larger contributors to national GDP if the revenue allocated is well utilized. Elgeyo Marakwet, for instance, increased its share of GCP from 1.3 percent in 2013 to 2.1 percent in 2017, while Nairobi County decreased its share from 23.5 percent to 19.8 percent over the same period. During the same time period, seventeen counties experienced faster growth in real gross county product than the average growth rate for all counties. Several counties experienced double-digit growth at some point during the same period, while others saw a decrease in economic activity. This highlights huge differences across counties while also highlighting the opportunity that devolution brings to the table in addressing the same (KNBS, 2019).

If these gaps are closed, Kenya is more likely to achieve the main expected outcomes of devolution, which include equal resource distribution, increased production of goods and services, increased employment, public participation, and development of marginalized regions (Ntara, 2013).

Fiscal decentralization, according to Age'nor (2007) and Kakar (2011), may influence county economic growth in the following ways: first, county infrastructure investment is thought to have a direct effect on economic expansion by increasing the county

capital stock. The second channel is the spending externality effect, which modifies growth indirectly by increasing the marginal productivity of private factors of production through education and health spending, which contributes to human capital accumulation. Inter-sectoral productivity differentials, which cause some industries to outperform others, are the third channel. The final channel is commodity spending, which increases aggregate demand.

2.3 Concept of Equitable Share

The re-distribution of fiscal capacity among the various levels of government, or the disposition of fiscal responsibilities among tiers of government, is referred to as equitable revenue allocation (Salami, 2011). The Kenyan Constitution of 2010 states in Articles 202(1) and 216(1) that the national government must share 15% of national revenue collected with county governments in the form of an equitable share using the CRA formula. This share is calculated using the most recent audited national accounts. The remainder of the county government's budget is funded by local revenue, loans, donor funding, and conditional allocations (the Republic of Kenya, 2019).

At least three principles dominate discussions about equity in revenue sharing. Fiscal need, fiscal capacity, and fiscal effort are among them. While not explicitly stated in the Kenyan constitution, they are present implicitly in Article 203 of the Kenyan constitution of 2010. The constitution mentions developmental needs, fiscal capacity, and incentives to optimize revenue collection. These are analogous to the three international principles that underpin revenue allocation politics. The protraction on revenue allocation, on the other hand, is between two concepts. One is population-based and dubbed one man, one vote, one shilling. According to this school of thought, allocation should be based on demographic distribution, and the entire concept of

development is about empowering people based on their numbers. The other school of thought believes in the mantra; one man, one kilometre, one shilling. This school of thought contends that one man, one shilling ignores other factors such as historical injustices and harsh geographical circumstances. The argument is countered by the fact that there is an equalization fund to cater for such exceptional circumstances, which eventually leads to Compensational politics, which causes conflict (Engefu, Omoro, & Kiinyua, 2021).

According to Engefu et al. (2021), revenue allocation and resource control show that in Kenya, revenue allocation takes four forms: vertical sharing between the national government and county governments, horizontal allocation among county governments, grants, and borrowings. Population, poverty index, land area, basic equal share, and fiscal responsibility are the five parameters used to determine horizontal allocation. The indices are calculated using no scientific method. Constitutional provisions, stakeholder consultations, causal connections, measurability, and international experiences were used to develop the parameters.

The revenue allocation model in a federal state could be used to eliminate economic disequilibrium, among other things. However, it frequently suffocates the entire economy, leading to problems such as poverty, unemployment, jobless growth, and crises, among other things (Ibrahim & Ahmad, 2013; Olowola, 2012). To avoid this, the higher the federal level of government transfers to the lower level of government, the better, so that it can make up the difference between its internally generated revenue and those needed to maintain the minimum level of services (Ojo, 2010).

2.4 Concept of Conditional Grant

Conditional grants are grants made by the national government to devolved governments that are subject to certain conditions (Ma, 1997). Recipients are frequently required to use some of the grant money for specific services or functions, to adhere to specific standards, and/or to report to the national government on a regular basis (Bird & Smart, 2002). The primary goal of these grants is to ensure that funds are spent to achieve mutually beneficial goals for both levels of government. Donors in Kenya may make conditional grants directly to counties. Conditional grants can be a valuable fiscal tool for ensuring cooperation between national and county governments during devolution, as devolved governments develop administrative and technical capacity.

Kenya's national government conditionally distributes revenue to county governments in the form of conditional distribution to public hospitals, free maternal health care, and compensation to county health facilities for foregone user fee revenue, medical tool lease, and road maintenance fuel tax fund, allocation for county road repair and maintenance, and allocations to respective county emergency funds. Loans or grants from development partners are used to fund additional allocations for each county government (the Republic of Kenya, 2015).

National governments frequently use conditional grants in the health sector to ensure the efficient and equitable delivery of core health services by creating incentives for more efficient government services, such as mandating centralized procurement mechanisms, uniform clinical standards, and minimum service delivery standards (Bischoff & Blaeschke, 2010). Because devolved governments may fail to invest adequately in key health priorities and may be inefficient users of public funds, funding counties through conditional grants rather than augmenting the unconditional equitable

share is a way to ensure that counties spend on priority areas (Lowndes & Gardner, 2016).

Conditional grants of any kind can improve effectiveness, equity, and efficiency; improve health-care quality by requiring recipients to use a portion of grant funds for specific services or to adhere to a minimum set of standards; increase resource mobilization; and influence politics. Conditional grants are classified into three types: matching open-ended grants where the national government matches a percentage of developed-county funding for a specific service. The cost to the national government in this case varies depending on devolved government expenditures. The second one is matching closed-ended grants where unlike open-ended grants, the national government establishes a ceiling or defined spending limit for the amount it will contribute to the devolved government level. Lastly non-matching grants where at the devolved government level, the national government consolidates several grants into one block and funds a wide range of activities within a specific sector, such as health or education (Bossert, Bowser, & Amenyah, 2007). Different types of grants can address various strengths and weaknesses in various county situations.

2.5 Concept of Own Source Revenue

Kenya's Constitution of 2010 establishes two levels of government: national and county governments. To budget for and carry out devolved governments, each county government has executive and legislative authority. The Constitution grants counties the authority to fulfil their mandates through the following five funding sources: an equitable share equal to at least 15% of the most recent audited revenue raised nationally, conditional and unconditional grants, an equalization fund, loans and grants, and own-source revenue (OSR). The term OSR refers to the revenue generated by

county governments from local sources, such as taxes, charges, and fees (Development Initiative, 2018).

Own resource mobilization gives counties control over their development agenda and has the potential to increase county officials' political and administrative accountability to their constituents. The Constitution of Kenya (CoK) 2010, the Public Finance Management (PFM) Act 2012, the County Government Act 2012, and the Urban Areas and Cities Act 2011 all support OSR mobilization. The Constitution empowers counties to levy property taxes, entertainment taxes, and any other tax authorized by a Parliamentary Act. User fees, such as packing fees, market fees, game park fees, house rents, infrastructure maintenance fees, water and sewerage fees, and trade licenses, are additional sources of revenue for county governments. County governments have the authority to charge for their services.

The County Governments have the authority to raise their own revenue through the imposition of taxes and service charges under Articles 209 (3) and (4) of the constitution. Own-revenue capacity is a critical component of local fiscal discipline, especially in a decentralized environment. When faced with fiscal constraints, county governments have fewer options because they lack access to their own revenue or even with year-to-year infrastructure development needs.

According to the Commission of Revenue Allocation (2019), the sources and number of revenue sources vary by county, depending on economic activities. Vehicle parking fees, game park fees, hospital fees, land rates, market fees, property rates, sand cess, transportation and infrastructure, and single business permits are among the sources. County governments received a total of Kshs. 1.894 trillion from 2013/14 to 2018/19,

consisting of an equitable share of Kshs. 1,572.7 billion (83%), conditional grants of Kshs.

In the first three years of devolution, own source revenue contributed thirteen percent of county revenue, while transfers from the national government contributed more than eighty-four percent (Development Initiative, 2018). The National Policy County Government OSR (2019) approved by cabinet aims to develop a policy on counties' own source revenue based on the five concerns listed below (National Policy to Support Enhancement of County Government, OSR, 2019): first, the diminishing OSR in comparison to total revenue streams; second, the manner in which counties plan and budget for local revenue; third, legal issues affecting revenue generation measures; and fourth, the short and long term macro-fiscal issues. 120.8 billion (6%), and own-source revenues of Kshs. 200.5 billion (11%).

A revenue collection report for County Government of Kitui, 2016 and (Ndunda, Ngahu, & Wanyoike, 2015) contend that since the establishment of County Governments in Kenya in April, 2013, County Governments have relied heavily on the National Treasury for financial support, despite their push for more government functions, including security, to be devolved.

This revelation is supported by the Commission on Revenue Allocation's (CRA) observation that, despite the fact that county revenue has increased to over Kshs 35 billion per year, counties continue to rely on the revenue share from the national government.

2.6 Theoretical Review

The theoretical framework is the bedrock upon which the entire research investigation is built. It provides a framework for defining how the researcher will approach the

research as a whole from a philosophical, epistemological, methodological, and analytical standpoint, as well as a guide for developing and implementing a research study. A theoretical framework is a lens through which a researcher views the world, and it should be relevant to the field of study. (Grant & Osanloo, 2014).

Fiscal decentralization, New growth theory, and theory of balanced growth are the established main theories underpinning the devolved system of governance, their revenue sources, and gross county product that were reviewed. Each theory is presented in detail in the section that follows. The theories represent various hypotheses about the effect of various county revenue sources on gross county product.

2.6.1 Fiscal Decentralization

Oates advocated decentralization theory in 1972, arguing that the welfare of society can be improved if the level of goods offered to the public by county governments is pareto-efficient rather than providing common consumption levels as determined by the country's national government (Oates, 1972). The provisions made by county governments benefit citizens based on their various preferences for public and private goods from various jurisdictions.

The most important political advancements in recent decades have been the far-reaching approach to cutting-edge decentralization of governments. Scholars from the seventeenth and eighteenth centuries contributed to the theoretical contextual study for fiscal decentralization. Though democratically based governments were viewed as the primary protectors of liberty men's freedoms, central governments were called into question (Faquet, 1997).

According to Godfrey (2016), the national government's provisions are similar to a monopolist in the private sector, denying voters an alternative. This suggests that the

demographic characteristics of a population can influence voters' decisions about where to live. For example, families with children who are still in school and have a sufficient income will live near desirable schools, whereas retirees will live in areas that provide services and benefits that meet their needs (Godfrey, 2016).

Devolution is important to citizens and the economy of a country because fiscal decentralization leads to efficiency in service provision. It aims to provide a more effective method of serving citizens' preferences for public-sector services, as well as to improve electoral accountability (Oates, 1972).

Wolman *et al.* (1997) advanced the current case for decentralized government by explaining the advocates' contentions into two themes: Efficiency Values and Governance Values. The monetary value visible as the amplification of social welfare is regarded as effectiveness. Ideally, every public benefit and administration conveyance should be provided in law in a way that completely conceals its points of interest and hidden costs.

According to Wolman et al. (1997), public sector delivery and share of products and services are thus characteristically political; however, nearly all conceivable expense and administration bundles should demonstrate the overall inclinations of network individuals. Governance values include responsiveness and responsibility, a wide range of diversity, and political commitment. Decentralization brings basic leadership closer to citizens and other interested parties. This promotes greater responsiveness of local experts and increased responsibility to the residents. This is due to local chiefs' desires to be more concerned with the issues and interests of their immediate surroundings than unified policymakers.

Furthermore, to the extent that accountability should be demonstrated through local races, those races are frequently determined by issues of local resource conveyance, whereas national decisions are rarely concerned with administration of service delivery.

This theory focuses on the responsibilities of politicians at various levels of government, such as presidents, administrators, and governors. Different aspects of the political framework can influence these lines of responsibility; however, one critical factor is the internal structure of political parties, as demonstrated by (Peters, 2014). He also stated that if parties are brought together, any bargaining over intergovernmental fiscal links will benefit the center and the state's financial structure will be more unified. As a result, if party administration is less concentrated, the state's fiscal structure will be more decentralized, with different aspects maintained consistent. In this manner, county governments should deal with their own sources of revenue and use them prudently in order to balance the interests of citizens and the taxes collected (Ngallawa, 2013).

According to Boserup (2013), fiscal decentralization has also been established as a key component of a global change strategy, which has been echoed by various development partners such as the World Bank, USAID, the Asian Development Bank, and others. In developing transitional economies, the theory has also become an essential component of monetary advancement and management approaches. Financial decentralization, as well as the need for local tact and power delocalization, are two of the most significant forces shaping administration and current improvement in tandem with globalization, according to the World Bank (World Bank, 1999).

It is therefore inferred that fiscal decentralization of government functions leads to the creation of a local market for public goods and allows the government to meet local

demand for public services, thereby increasing efficiency. This will increase the Gross Domestic Product of the specific county. This is due to the fact that representatives of the electorate elected in the various counties are more accountable and accessible to the people (Godfrey, 2016). Fiscal decentralization (FD) theory is thus important to explain the role of fiscal decentralization towards CGP and economic growth and development in Kenya, as taxation and spending powers, as well as political authority to manage essential services, have been devolved to county governments (Godfrey, 2016). As a result, this theory was appropriate choice for this study because it provided a solid framework for developing hypotheses for this research.

2.6.2 New Growth Theory

Romer (1986) developed the new growth theory, which was later advanced by Lucas (1988) and Aghion and Howitt (1992). The theory explains why many less developed countries perform poorly in terms of economic growth despite having implemented policies that adhere to the propositions of neoclassical theories. According to this theory, technological advancements have been unequal and have not been transmitted exogenously in a number of developing countries (World Bank, 2000). Proponents of new growth theory linked technological knowledge changes to production. The theory emphasizes that economic growth is the result of increased returns to knowledge use and technology rather than labor and capital.

According to the new growth theory, lower levels of complementary investment in the education system, physical infrastructure, and research and development initiatives reduce the expected rates of return in the Solow model (Meier, 2000). Despite explaining differences in economic growth rates across countries, the new growth

theory has been criticized for ignoring societal and institutional structures (Skott & Auerbach, 1995).

The theory has limited applications due to its unrealistic assumptions. For example, in the midst of structural change, the economy is treated as a single firm, with no room for labor and capital reallocation to generate revenue. Other economic growth stimuli, such as adequate infrastructure, institutional structures, and perfect capital and goods markets, are lacking in developing countries (Cornwall & Cornwall, 1994).

The new growth theory promotes the role of government as well as public policy in human capital formation investments. The theory also advocates for private investments by foreign investors and other development partners in knowledge-intensive industries such as telecommunications and computer software to foster economic growth (Meier, 2000). This explains why this theory was chosen as the foundation for this study. This therefore explains why this theory was chosen as the foundation for this study.

2.6.3 Theory of Balanced Growth

Ragnar Nurkse proposed the theory of balanced growth (1907–1959). The main impediments to development are a narrow market and limited market opportunities. Only a complementary investment bundle can generate mutual demand under these conditions. As a result, governments must plan for investment in order to achieve balanced growth (Merrifield, 2010).

According to Fernando (2009), the theory of balanced growth is supported by the fact that due to low demand for goods, the propensity to invest is low, which translates to low capital equipment per capita and per worker. This eventually leads to low productivity and income, and thus increased poverty. This theory was relevant to this study because it explains how county governments should make investment decisions

based on various sources of revenue in order to improve the well-being of the community (Whitworth & Whitworth, 2010).

2.7 Empirical Literature Review

This section explores studies on gross county product, equitable revenue share, conditional grants and own source revenue.

2.7.1 Equitable Revenue Share and Gross county product

Between 2003 and 2013, Shai (2017) investigated the effect of the Local Government Equitable Share (LGES) on Own Revenue Generation in South African Municipalities. Using the conventional least squares (OLS) estimation technique and the Census shock instrumental variable approach, the paper discovered a statistically significant negative impact of the LGES on metropolitan own revenues when fiscal capacity and fiscal effort were controlled for. According to the study, a 1% increase in the LGES results in a 0.95% decrease in municipal own revenue in South Africa. When operating expenses are factored into the model, the effect of the LGES is close to zero and statistically insignificant.

Masaki (2018) investigated the impact of intergovernmental transfers on local revenue collection by Tanzania's rural districts. The study, which used the SGMM model to determine the relationship, concluded that intergovernmental transfers in Tanzania are stimulatory in nature and actually facilitate rather than undermine local revenue generation by local government authorities (LGAs).

Local governments rely heavily on intergovernmental transfers, particularly from state governments. However, these intergovernmental transfers are only one component of a complex system of intergovernmental fiscal and regulatory linkages. Because of the changing roles of the federal, state, and local governments in providing social assistance

to low-income households, local finances are dependent on the entire national fiscal system (Wildasin, 2010).

Between 2000 and 2005, when Beijing used generous outlays to push for tax and tariff reforms in rural areas, Zhang (2013) investigated the impact of intergovernmental transfers on the fiscal behaviour of local governments in China. The cross-county analysis of the study estimated county governments' responses to various types of fiscal transfers, including tax returns (TRs), fiscal capacity transfers (FCTs), and special-purpose transfers (SPTs), either by activating local tax burdens via the stimulating effect or by lowering the local taxation rate via the substitution effect. In the statistical analysis of the study, a simple linear regression model was used. The quantifiable research findings revealed that TRs were profoundly stimulating in all types of local tax spending and income-generating activities; FCTs were marginally surrogate in their impact on local fiscal spending and extra budgetary income, implying that the main strategy of using tax transfers to reduce the monetary burden imposed on taxpayers achieved little. Special purpose transfers had only a stimulatory effect on local fiscal expenditure, demonstrating the power of local units coordinating with central government requirements. Intergovernmental fiscal transfers in China were found to be stimulatory in nature in general, which is an intriguing finding from a universally similar perspective.

Shah (2007) discovered that the federal government collects more revenue than is required to meet its own expenditure/regulatory responsibilities in a study of twelve federal countries. A fiscal surplus allows the federal government to use its spending power to pursue national goals through fiscal transfers. These transfers aid in the achievement of national goals while also promoting decentralized decision making.

Fiscal transfers from the federal government finance nearly two-thirds of sub-national expenditures in Spain and South Africa, but less than 20% of such expenditures in Canada, Switzerland, and Nigeria. In a federal system, the design of such transfers is critical for efficiency, equity, and accountability.

Rodden (2002) investigated the sub-central budget constraint (own-source revenues as a percentage of sub-central spending) and discovered that fiscal decentralization, as measured by the IMF, promotes government indebtedness if sub-central spending is funded through fiscal transfers rather than own-source revenues and the central government has not imposed a hard limit on sub-central spending.

As a parameter, Basic Equal Share has a significant equalizing effect in that all counties are treated equally regardless of size or population. According to the CRA, this component was included because all counties, regardless of size, have some basic expenses that must be met (Republic of Kenya, 2012). These services, which include salaries and other expenses for County Executives and County Assemblies, are critical for effective county governance and administration. Furthermore, Article 176 of the Constitution requires county governments to decentralize their functions and service delivery even further.

2.7.2 Conditional Grants and Gross county product

Brun et al. (2016) investigated the incentive effects of conditional and unconditional transfers on local own source revenue generation by Moroccan municipalities using fixed and random-effect and Hausman-Taylor estimation techniques. According to the study's findings, unconditional fiscal transfers have a significant catalytic effect on the mobilization of local per capita own income in Morocco, while conditional transfers have a less powerful effect, implying that unconditional per capita transfers from the

national government positively influenced municipalities' own source revenue generation in Morocco.

Bravo (2011), investigated the impact of intergovernmental grants on local revenue in Chile. Because intergovernmental grants are endogenous, he takes advantage of a flaw in a component of the Chilean formula for resource distribution and employs a panel of 340 Chilean municipalities from 1990 to 2007. The study discovered empirical evidence that intergovernmental grants have a negative effect on local revenue in Chilean municipalities. A one standard deviation increase in per capita grant amount is associated with a 0.25 to 0.30 standard deviation decrease in local per capita revenue. However, the effect varies depending on the type of local revenue.

Nzau (2014) examined the effects of fiscal decentralization, with a particular focus on decentralized funds, on the growth of the Kenyan economy, using time series annual data from 1993 to 2012. It was discovered that the majority of devolved funds are matching/conditional grants, and as a result, subnational governments have very limited ability to allocate funds to key priority areas within their jurisdictions. As a result, the study recommended that county (subnational government) allocations take the form of unconditional grants.

2.7.3 Own Source Revenue and Gross county product

Thornton (2007) investigated fiscal decentralization and economic growth in 19 OECD member countries while accounting for the independent taxing powers available to sub-national governments. A cross-section study of 19 OECD member countries found that when fiscal decentralization is limited to revenues over which sub-national governments have complete control, the impact on economic growth is not statistically significant.

According to Kosaye (2018), county governments generate revenue from consolidated funds and locally generated funds from levies, which is insufficient to meet the vast mandate bestowed upon them. According to the Controller of Budget report (CBR) on county spending for the 2014/2015 fiscal year, most of these county governments were unable to meet half of their revenue targets in the fiscal year 2014/2015 due to increased loopholes in collection systems. According to Mutua and Wamalwa (2017) one of the challenges, particularly for local governments, is reliance on central government transfers.

In Nigeria, Taiwo (2021) investigated the effects of unconditional intergovernmental transfers on sub-national governments' own revenues. The study, which used the instrumental variables estimator and Simultaneous Generalized Method of Moment (SGMM) models, used states panelized data with time and cross-sectional dimension between 2007 and 2013 to determine the effect of intergovernmental transfers' yearly variation on Nigerian federal states' own incomes. The empirical study findings revealed that a 1% increase in unconditional intergovernmental transfers resulted in a 0.64 percent decrease in state per capita own revenues and concluded that subnational governments in Nigeria are transfers-dependent on unconditional central government transfers that are substitutory rather than stimulatory in nature.

Mwanga, Maniragaba, and Ariho (2020) used the fixed effects regression model to analyze the patterns of national government fiscal disbursements on independently produced revenues by Ugandan municipal councils from 2002 to 2017. They were investigating the effects of central government transfers on local revenue collection by urban local governments in Uganda. The study found that the omitted total of national government disbursements had a significant negative impact on municipal revenues

generated locally. The findings implied that the Ugandan administration should consider the administration formula for national government disbursements to the performance of locally generated revenues as a motivation for municipal councils in the country to raise their own local revenue.

Another MIRI (2019) study looked at the effects of central transfers on local revenue' in Morocco. The study, which used ordinary least square regression to examine the fixed and random effects of transfers, discovered a critical and positive relationship between transfers and own source revenues for the static model, implying that tax revenues generated by local governments from the management of central transfers aid in the generation of local own source revenues in Morocco. When the dynamic version of the generalized method of moments (GMM) model is used, the lagged variables used as instruments in the regression model reveal an adverse and notable relationship between central disbursements and local revenues, as well as those resulting from State's taxes to supplement central transfers. Taking into account all variables, the study concluded that an increase in central transfers by one has a negative impact of - 0.10 on own revenue and - 0.15 on own income from state-controlled taxes for local revenues and taxes and products managed by Moroccan local authorities.

Gituma (2017) investigated the various factors influencing effective revenue collection in Embu County. The research looked at how employee qualification, corruption, technology, government policies, and regulations influenced optimal revenue collection in Embu County. The study looked into two more variables: government policies and corruption. According to the study, government policy, rules, and regulations had the greatest impact on optimal revenue collection, followed by corruption, employee qualification, skills, and training, and technology and information systems.

Karori, Muturi, and Mogwambo (2016) investigated the impact of revenue collection efficiency on Kisii County Government operational performance. The study found that benchmarking strategy influences revenue collection, which influences operational performance, and that supervisory systems influence revenue collection, which influences operational performance. The study concluded that Kisii County Government has the potential to collect more revenue if its supervisory systems are improved, computerized systems are fully utilized, and targets are met.

Adenya and Muturi (2017) investigated the factors that influence revenue collection in Kiambu County. In their study human resources, technology, internal controls, and law enforcement were all investigated. The study found that the county had competent personnel and followed internal controls, but it lacked technology and enforced taxation rules poorly.

Kimutai (2017) examined revenue mobilization strategies, approaches, and their impact on county socioeconomic development in the North Rift region. His research went a step further by investigating the impact of the variables on the socioeconomic development of a larger region made up of several counties. Training, technology, stakeholder collaboration, the impact of revenue mobilization infrastructure, and the challenges faced by county governments in implementing revenue mobilization approaches were the determinants under consideration. The study found that training, technology, and stakeholder collaboration have a positive and significant impact on revenue mobilization strategies and, as a result, on county socioeconomic development.

Khadondi (2018) investigated how urbanization, intergovernmental grants, poverty, and land area affect county revenue collection. Except for land area, the study found that all of the independent variables were statistically significant. The study

recommended that; county governments should concentrate on developing urban areas, intergovernmental grants be increased and lowering of poverty be made a priority.

Naburi (2017) investigated the collection and enforcement of property taxes. According to the findings of the study, compliance rates are low. Further, the county government relied on reactive interest, social pressure in the form of publishing the names of defaulters, sanctions and penalties, and the provision of an interest-free period from January to March each year. The study concluded that poor property tax collection was caused by ineffective administration and political interference. The study recommended improved public service, capacity building, a computer-assisted property rates administration system, and political support mobilization.

Fjeldstad and Heggstad (2012) conducted a study titled local government revenue mobilization in Anglophone Africa, with a focus on urban areas. The study examined a variety of cases from Anglophone Africa. The study's overall conclusion was that local revenues mobilized in most African local government authorities are necessary but insufficient to develop and provide adequate services for Africa's rapidly growing population.

2.8 Summary of Literature and Research Gaps

After reviewing related literature on gross county product, equitable share, county conditional grants and own source revenue, several research gaps were identified as indicated in Table 2.1.

Table 2. 1: Summary of Empirical Review and Gaps in Knowledge Identified

Authors	Topic	Methodology	Findings	Knowledge Gaps
Masaki (2018)	Impact of intergovernmental transfers on local revenue collection by Tanzania's rural districts.	The study applied the SGMM model to determine the relationship between the study variables.	Intergovernmental transfers in Tanzania are stimulatory in nature and actually facilitate rather than undermine local revenue generation by local government authorities (LGAs).	The reviewed study was done in Tanzania with focus being on the impact of intergovernmental transfer on local revenue collection. The current study was done in Kenya, with the main objective being the evaluation of the effect of various county revenues sources on the gross county product applying the panel estimation.
Shai (2017)	The effect of the Local Government Equitable Share (LGES) on Own Revenue Generation in South African Municipalities.	Conventional least squares (OLS) estimation technique and the Census shock instrumental variable approach.	The study revealed a significant negative impact of the LGES on metropolitan own revenues when fiscal capacity and fiscal effort were controlled for. According to the study, a 1% increase in the LGES results in a 0.95% decrease in municipal own revenue in South Africa.	The study was done in South Africa looking at the effect of equitable share on the municipality's own source revenue. The current study endeavoured to examine the role of all sources of county revenues on the gross county product in Kenya.
Brun et al. (2016)	The incentive effects of conditional and unconditional transfers on local own source revenue generation by Moroccan municipalities.	The study applied fixed and random-effect and Hausman-Taylor estimation techniques.	Findings indicated that unconditional fiscal transfers have a significant catalytic effect on the mobilization of local per capita own income in Morocco, while conditional transfers have a less powerful effect, implying that unconditional per capita transfers from the national government positively influenced municipalities' own source revenue generation in Morocco.	The study was conducted in Morocco with the sole intention of determining the effect of both conditional and unconditional grants on own source revenue. This study endeavoured to apply the panel model to confirm the effect of all sources of revenue on gross county product. There was therefore presence of content, contextual and methodological gap to be filled by this current study.
Nzau (2014)	The effects of fiscal decentralization, with a particular focus on decentralized funds, on the	The study applied time series annual data from 1993 to 2012.	The study discovered that the majority of devolved funds are matching/conditional grants, and as a result, subnational governments have very limited ability to allocate funds to key priority areas within their jurisdictions.	The study was conducted in Kenya with the intention of confirming the effect of conditional and unconditional grants on the growth of the Kenyan. Economy. However the current study will extend this study by including other sources of revenues such as: own source revenue, development partners' conditional grants in examining their impact on gross county product by applying

	growth of the Kenyan economy.			explanatory research design to fill the content, contextual and methodological gaps.
Taiwo (2021)	The effect of unconditional intergovernmental transfers on sub-national governments' own revenues in Nigeria.	The study applied the instrumental variables estimator and Simultaneous Generalized Method of Moment (SGMM) models and states panelized data with time and cross-sectional dimension between 2007 and 2013.	The empirical study findings revealed that a 1% increase in unconditional intergovernmental transfers resulted in a 0.64 percent decrease in state per capita own revenues and concluded that subnational governments in Nigeria are transfers-dependent on unconditional central government transfers that are substitutory rather than stimulatory in nature.	The study was done in Nigeria with focus on the role of unconditional intergovernmental transfer. The current study applied the panel model to estimate the contribution of various sources of revenue to the gross county product. As a result, the current study attempted to bridge the conceptual, contextual, and methodological gaps.
Mwanga, Maniragaba, and Ariho (2020)	An analysis of the patterns of national government fiscal disbursements on independently produced revenues by Ugandan municipal councils.	The study applied the fixed effects regression model from 2002 to 2017.	The study found that the omitted total of national government disbursements had a significant negative impact on municipal revenues generated locally. The findings implied that the Ugandan administration should consider the administration formula for national government disbursements to the performance of locally generated revenues as a motivation for municipal councils in the country to raise their own local revenue.	The study was conducted by applying limited key variables and ignored the role of other sources of revenues. The current study employed other sources of revenue that are necessary to influence growth at the county levels. Thus there was content, contextual and methodological gaps to be filled by this research.
Gituma (2017)	Factors influencing effective revenue collection in Embu County	The study looked at how employee qualification, corruption, technology, government policies, and regulations influenced optimal revenue collection in Embu County.	According to the study, government policy, rules, and regulations had the greatest impact on optimal revenue collection, followed by corruption, employee qualification, skills, and training, and technology and information systems.	This study was conducted in Kenya considering only one county. The proposed study therefore explored gross county product as the dependent variable and incorporated other county sources of revenue a part from own source revenue and by applying panel model estimation. This therefore further explains that there was indeed content and methodological gaps to be filled by this current study.

Source: Author, 2022

2.9 Conceptual Framework

The relationship between the study variables (independent variables and dependent variable) was conceptualized as shown by figure 2.1. It shows the relationship between specific county equitable share, national government conditional grants, development partners' conditional grants and the specific county own source revenue.

INDEPENDENT VARIABLES   **DEPENDENT VARIABLE**
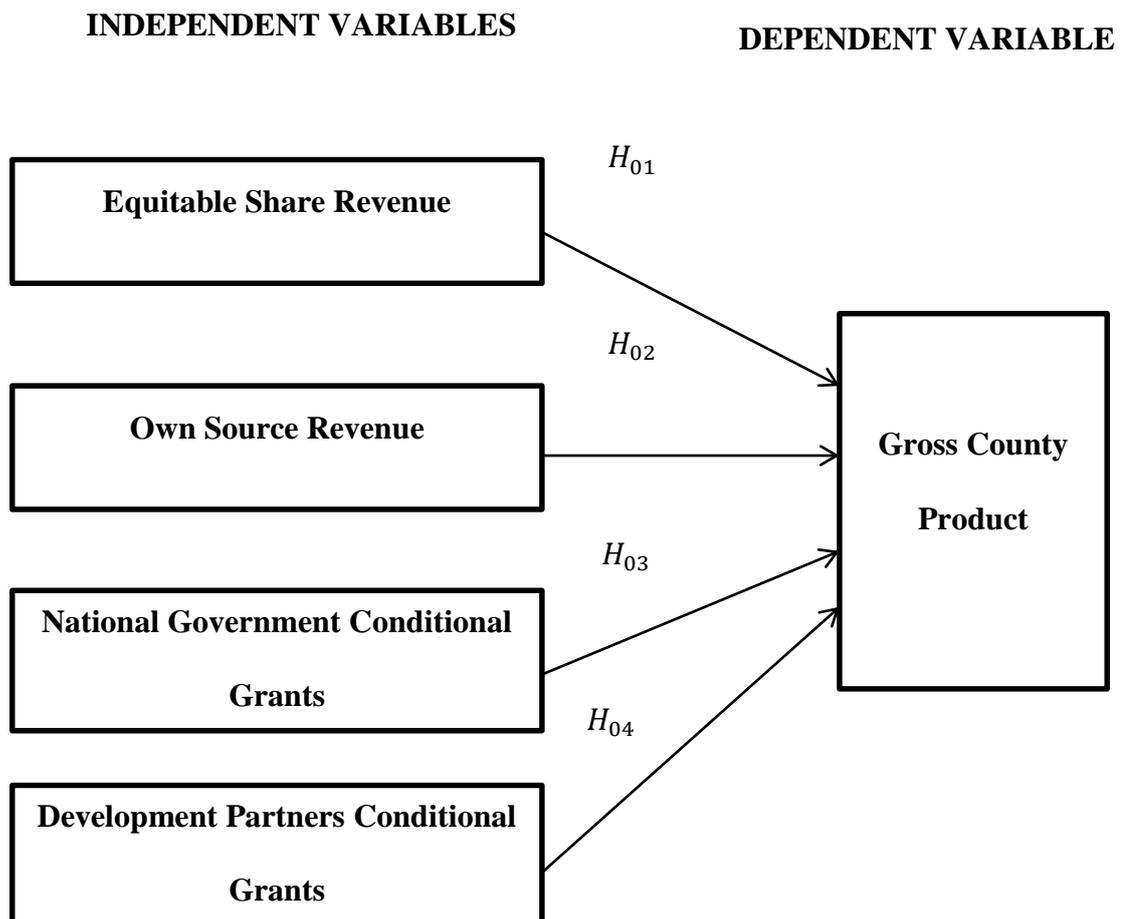
Figure 2. 1: Conceptual Framework

Source: Researcher's own conceptualization (2022)

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Overview

This chapter highlights the research design, target population, data collection tools and processes, measurements of the study's variables, data processing, analysis, and presentation, as well as ethical considerations.

3.2 Research Design

A research design is a master plan that specifies procedures and methods for data collection and analysis that answers research questions intended for any (Zikmund *et al*., 2013). It serves as the guide for data collection, measurement, and analysis (Kothari, 2004). Sample procedures, research strategies, tools, and methods for acquiring data, analyzing results, and reporting conclusions are all elements of study design. The longitudinal research design was used in this investigation. Given that it entails gathering numerical data on the same variable over an extended period of time, this study design was deemed appropriate because it takes into account a panel data set for a ten-year period between 2013 and 2021, this design was therefore perfect for this research.

3.3 Target Population

The population that contains all of the study's relevant study components is referred to as the target population. A population, according to Ngechu (2017), is a predetermined group of the subjects of an investigation that includes the individuals, services, elements, events, and household. All counties in Kenya created by the 2010 constitution constituted the study's primary population. Kenya has 47 counties, according to the 2010 Kenyan constitution.

3.4 Data Types and Sources

The study relied on secondary data extracted from annual reports and financial statements of county governments in Kenya. Additionally, data collection process was be guided by a data collection schedule. The specific data that was sought by this study included gross county product, share of equitable revenue, conditional grants from the national government and conditional grants from donors.

In addition to providing additional information to aid in problem solving, secondary data are helpful for improving comprehension and characterizing the study problem (Ghauri & Gronhaug, 2005). Saving time and resources, receiving comparative and contextual data, making unexpected discoveries due to the use of proper procedures, and relative ease of access are all advantages of using secondary data sources (Sekaran & Bougie, 2019). Vartanian (2010) asserts that annual reports of companies are more reliable than other secondary data sources. Furthermore, they claim that the data and information derived from yearly reports exhibit a high degree of reliability and quality.

3.5 Measurement of Variables

The purpose of this study was to investigate the effect of county revenue sources on the gross county product in Kenya. The study's variables were classified as independent and dependent variables.

Table 2. 2: Definition and Measurement of terms

Variable	Definition	Measurement
Gross county product (CGP)	Total value of goods and services measured in monetary terms that are produced within the geographical boundaries of a county	Natural log of CGP in Kshs current prices
Equitable share (ES)	The share of revenue received by the county governments from the national government that is raised by the national government nationally/	Natural log of ES in Kshs current prices
Own Source Revenue (OSR)	Refers to the revenue raised by the county government from within its geographical boundaries as envisaged by the constitution of Kenya 2010	Natural log of OSR in Kshs current prices
Conditional Grants from National Government (NGCG)	Refers to the revenue received by the county governments from the national governments to facilitate developments but with their conditions attached.	Natural log of NGCG in Kshs current prices
Development Partners Conditional Grants (DPCG)	Refers to the revenue received by the county governments from various development partners like USAID and the World Bank with some conditions attached.	Natural log of DPCG in Kshs current prices

Source: Researcher, 2022

3.6 Panel Unit Root Test

The unit root test examines the stationarity of the data. The data series is stationary if the mean and variance are constant over time and the magnitude of the covariance between the two time periods just depends on the distance or lag between the two time periods (Damodar & Down, 2010). For a combined time series and panel results, the use of a unit root test will substantially increase the strength of the test (Levin *et al*., 2002). It is necessary to test for unit root because estimating time or panel series variables that are not stationary leads to spurious regression. If the series are non-stationary, they are differenced until they become integrated (stationary). Therefore, this study employed Levin-Lin-Chu and Im-Pesaran-Shin tests to examine stationarity

of the data. Before carrying out regression analysis, Panel unit root test is tested on each individual series (Greene, 2012) recommends use of different panel unit root tests to check for consistency and robustness. Therefore, the following panel unit root tests were estimated.

3.6.1 Levin-Lin-Chu Panel Unit Root Test

The Levin-Lin-Chu panel data unit root test is performed on the following model;

$$\hat{\rho}_{Yi}^2 = \frac{1}{T-1}\sum_{t=1}^{T}\Delta Y_{it}^2 + 2\sum_{L=1}^{\bar{K}}\omega\bar{K}L\left[\frac{1}{T-1}\sum_{t=2+L}^{T}\Delta Y_{it}\Delta Y_{it-L}\right]\ldots\ldots\ldots\ldots\ldots\ldots\ldots 3.1$$

Where ε_t a white noise process is $\rho = 1$ indicates a unit root $0 < \rho < 1$ implies stationarity (Levin *et al*., 2002; Phillips & Moon, 2000, 1999). (Levin *et al*., 2002) suggests a panel unit root test against a homogeneous stationary hypothesis for the null hypothesis of unit root.

3.6.2 Im-Pesaran-Shin Unit Root Test

An expansion of the Dickey-Fuller (DF) assessment is Im-Pesaran-Shin, (IPS). For pure time series, the classic DF test usually presented as;

$$\Delta Y_{it} = \phi_i Y_{i,t-1} + Z_{it}'\gamma_i + \varepsilon_{it}\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots3.2$$

Where ε_t is a white noise $\rho = 1$ indicate a unit root $0 < \rho < 1$ implies stationarity (Im *et al*., 2003). The null hypothesis for this is that all panel contain unit root.

3.7 Economic Model

Contemporaneous correlation generalized least squares (GLS) regression with correlated disturbances will be fitted into the data. Following Baltangi (2005), Hsiao, (2007), Manuel, (2005) and Semykina & Wooldridge (2010) the case of autoregressive autocorrelation between panels and cross-sectional correlation and heteroscedasticity, the programmed syntax allows for estimation. Panel data regression models are more

useful when the outcome variable is believed to be dependent on explanatory variables that are not measurable but consistent with the explanatory variables observed. When such omitted variables are constant over time, panel data estimators cause the impact of the explanatory variables observed to be consistently calculated. Therefore, the equation from which the estimation model was developed is as follows:

The model considers a multiple linear regression for individual $i = 1 \ldots N$ which is observed at several time periods $i = 1 \ldots. T$

$$y_{it} = \alpha + x'_{it}\beta + z'_i\gamma + c_i + u_{it} \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots \text{3.3}$$

Where y_{it} is the response variable, x'_{it} is a time *K*-dimensional row vector-different independent variables and z'_i is an *M*-dimensional row vector of time-invariant independent variables except the constant, α is the intercept, β is a parameter *K*-dimensional column vector, gamma is a parameter *M*-dimensional column vector, c_i is an individual-specific effect, and u_{it} is an idiosyncratic error term. It is assumed that each individual *i* is observed in all time periods *t*.

3.7.1 Random Effects versus Fixed Effects Estimation

Usually, this test is referred to as a specification test. In panel data analysis, the Hausman test aids in the selection of one of two models, Fixed Effects (FE) or Random Effects (RE) (Hausman, 1978). Fixed effects are inefficient but predictable, whereas random effects are efficient but unpredictable. The null hypothesis also supports the random effects model as the preferred model. In addition, the model could be fixed effects. Thus, under the null hypothesis, the model of choice is RE, as it is more efficient and can handle fixed regressors across people. When a sample includes the entire population, the reciprocating variable is fixed; however, when only a small percentage

of the population is included in the sample, the reciprocating variable is random (Green & Tukey, 1960).

It is critical to realize that the test is looking for a link between the model's unique errors and explanatory variables.

The null hypothesis is used when there is no correlation between the two variables. When the p-value is less than or equal to a specified level of significance, for example, 0.05, 0.01 or 0.1, the null hypothesis is rejected. The difficulty arises from the fact that multiple variants of the tests exist, each with a distinct hypothesis and probable conclusion. The random effects model will accurately measure both the RE estimator and the FE estimator. The RE estimator is preferred where there is a certainty that the individual-specific effect is not an unrelated result. This is tested by (Durbin-Wu) Hausman test. However, the Hausman test is only valid under homoskedasticity and cannot include time fixed effects.

3.7.2 Hausman Test

To decide between fixed or random effects, Hausman test is needed (Green, 2008). It tests whether the unique errors (c_i) are correlated with the regressor. Hausman test null hypothesis is that the random effect is appropriate versus the alternative that fixed effect is appropriate. If the probability of the Hausman test is more than 5 percent significance level, random effect model is appropriate otherwise fixed effect model. To carry out the Hausman test, the following estimators were calculated.

$\hat{\beta}_{RE} - \hat{\beta}_{FE}$ and its covariance. The effective estimator's covariance with its difference from the inefficient estimator should be zero. The following is the evaluation under the null hypothesis. $W = (\beta_{RE} - \beta_{FE})'\hat{\Sigma}^{-1}(\beta_{RE} - \beta_{FE})$ Follows a chi-square distribution

with k degrees of freedom. If W is significant, random effects estimator should not be used.

3.7.3 Model Specification

Gross county product was expressed as a function of X_{it} independent variables defined by equation 3.4.

$$CGP_{it} = f(X_{it})\text{……………………………………………………………………….}3.4$$

Expanding equation 3.4 and using panel equation 3.3

$$CGP_{it} = \beta_0 + \beta_1 OSR_{it} + \beta_2 ESR_{it} + \beta_3 NGCG_{it} + \beta_4 DPCG_{it} + c_i + e_{it}\text{………....}3.5$$

Where: CGP_{it} is the gross county product, β_0 is the constant, OSR_{it} is the own-source revenue in period t, ESR_{it} is equitable share revenue in period t, $NGCG_{it}$ national government conditional grants in period t, $DPCG_{It}$ development partners conditional grants in period t, $\beta_1\ \beta_2, \beta_3\ \beta_4$ are the parameters of the model, c_i the specific individual effects and e_t is the random error term.

3.8 Assumption of Multiple Linear Regression

The assumptions of multivariate linear regression discussed in the subsequent section are multicollinearity, heteroscedasticity, normality and serial correlation.

3.8.1 Multicollinearity

This study tested this assumption by examining the correlation matrix, tolerance, and variance inflation factor (VIF) values to determine the presence of multicollinearity. VIF reveals if a predictor has a strong linear relationship with another predictor or set of predictors (Field, 2009), and the tolerance value is calculated by dividing one by the value of VIF (Field, 2009). The variance inflation factor (VIF) is a term that refers to a component that raises the variance of a given partial regression coefficient due to the

variable's degree of correlation with the other predictors in the model (Dennis, 2011). As a general rule, lower levels of Variance Inflation Factor (VIF) are preferable, as higher levels of VIF have been shown to have a detrimental effect on the outcomes of multiple regressions.

While the explanatory variables should be correlated to some extent, if they are strongly correlated, it is impossible to discern the independent influence of an explanatory variable on the criterion variable in order to test for the inflation factor (VIF) and multicollinearity tolerance values. When the VIF value is 10 or greater, it implies that a predictor has a strong linear association with other predictor variables (Hair, Black, Babin, Anderson, & Tatham, 2006). A VIF of less than three (VIF 3) indicates the absence of multicollinearity, whereas a VIF of more than three (VIF 3) indicates the presence of multicollinearity.

3.8.2 Heteroscedasticity test

An instance where the error term varies between observations is referred to statistically as heteroscedasticity. To ascertain whether error terms in this study have a constant variance, the Breusch-Pagan/Cook-Weisberg test was used (should be Homoscedastic). A major requirement of ordinary least squares (OLS) is broken by heteroscedasticity when the error variance is not constant (Gujarati, 2007). Heteroscedasticity has the effect of making the estimated coefficients impartial and inefficient. According to (Kothari, 2004), heteroscedasticity develops when error terms affect both the independent and dependent variables. Depending on the findings, it is concluded that the error term has no effect on the independent variables or the dependent variable. Rather than that, the error terms are homoscedastic, which means they have no effect on the model's individual variables.

3.8.3 Normality Test

Normality is used to determine whether data sets are sufficiently designed by a normal distribution and to calculate the probability of the random variable that underlying the set of data regarded to be normal. This study applied descriptive statistics, which entails calculating the goodness of fit of a normal model to the data. When the goodness of fit is low, the model is not well-fitting to the normal distribution without regard for the underlying variable (Henry, 2002). The Jarque-Bera (JB) test, developed in 1987, is the most widely used test for normality (Jarque & Bera, 1987).

3.8.4 Serial Correlation Test

The Durbin-Watson tests were both used in the study to evaluate the serial correlation premise. The bias introduced by serial correlation lowers the effectiveness of panel data models. Durbin Watson tests are performed on numbers between 0 and 4. When the error term of one observation is correlated with the error term of another observation, there is a serial correlation result. The faults are seen as serially related as a result. When error terms from various time periods (or cross-section data) show a correlation or when errors from one time period are repeated in later time periods, this is known as serial correlation in time-series research. The most typical instance of this is when there is an economic relationship between the observations, as in time series data, where the observations are measurements of the same variable at several points in time or on related subjects.

3.9 Data Analysis and Presentation

The collected data was subjected to a number of data analysis techniques. This section summarizes each of these critical procedures in detail. STATA version 14 was used to analyse all data, and provided output summaries. STATA is a critical package since it includes broad data manipulation capabilities and several statistical analysis procedures

capable of analysing modest to extremely big data sets Carrin, Mathauer, Xu, and Evans (2008). In summary, Pearson moment correlation coefficients was used to investigate the relationship between the dependent and independent variables, panel regression analysis was used to test the relationship between the dependent and the independent variables.

3.9.1 Descriptive Statistics

Descriptive analysis, according to Zikmund, Carr, and Griffin (2013), is the process of converting raw data into a form that is simply understandable and comprehensible by the rearranging, sorting, and manipulating of data to produce descriptive facts. Each descriptive statistic reduces a vast amount of data to a smaller, more manageable amount, assisting the researcher in effectively simplifying large volumes of data. Descriptive statistics can be presented in one of two ways: numerically or graphically. This inquiry will employ both strategies. Both descriptive and inferential methods were applied to quantitative data. There were several different central tendency metrics used to assess the data.

3.9.2 Inferential Statistics

Inferential analysis include correlation and regression. The results were presented using tables and figures. A statistical method called correlation analysis examines the degree of connection between two or more variables (Levin, 2011). The analysis is the initial step in identifying the relationship between the independent and dependent variables in statistical modeling. A correlation matrix was created before multiple regression analysis was conducted.

The relationship between the independent variables was analyzed to aid in the development of a multiple prediction model that identifies non-existence of relationships where the correlation value is 0. When the correlation is 1.0, it indicates

the existence of an ideal negative or positive relationship (Hair et al., 2006). According to the values interpretation, there is no relationship between 0 and 1, whereas there is a perfect relationship between 0 and 1. The Panel data model's regression analysis will be utilized to assess and estimate the effect of the independent variable on the dependent variable. Panel data will be utilized to analyze and quantify relationships between variables, which will be expressed as an equation capable of predicting generally the values of one variable given the values of other variable.

3.10 Ethical Issues and Consideration

It is pertinent to consider the ethical implications of the research process (Mugenda & Mugenda, 1999). In this study, the major ethical issues that were considered are informed consent, privacy and confidentially and researcher's responsibility. The research findings were presented to Moi University School of graduate studies and the National Council of Science, Technology, and Innovation for ethical approval. The research findings will also be disseminated to the relevant stakeholders through publications in peer reviewed journals. The researcher took personal responsibility to only collect and analyze data required to fulfil /achieve the objectives of this study. Finally, there was no conflict of interest in this study.

CHAPTER FOUR

RESEARCH FINDINGS AND DISCUSSION

4.1 Overview

This chapter discusses the data analysis and the study's conclusions based on its goals. Tables were used to organize and present the data. The study objective informed the analysis and interpretation of the data that had been gathered. Stata was used in the study's data analysis along with a variety of statistical approaches. The data analysis, presentation, and interpretation of the results are also covered in this chapter. The conclusions are relevant to the goals that drove the study.

4.2 Summary Descriptive Statistics

From the Table 4.1, the mean of gross county product was 165 Billion (standard deviation =315 Billion; Minimun=12.9 Billion; Maximum=2.90 Trillion. The gap between the minimum value and the maximum value of gross county product was big as indicated by the difference between the minimum and the maximum values. This was also supported by higher value of standard deviation of 315 Billion. The mean of equitable revenue share was 6.45 Billion (standard deviation =2.66 Billion; Minimum=1.51 Billion; Maximum=19.4 Billion). This indicates that the county governments in Kenya receive an average of 6.45 Billion share of equitable revenue from the national government. The deviation from the mean of equitable revenue share was relatively larger as supported by a standard deviation of 2.66 Billion.

The mean of own source revenue was 774 Million (standard deviation =1.69 Billion; Minimum=20.2 Million; Maximum=16.2 Billion). This indicates that the county governments in Kenya raise an average of 774 Million own source revenue from within

the county. The deviation from the mean of owns source revenue was relatively larger as supported by a standard deviation of 1.69 Billion.

The mean of conditional revenue from the national government was 358 Million (standard deviation =354 Million; Minimum= 3.92 Million; Maximum=5.32 Billion). This indicates that the county governments in Kenya receive an average amount of 358 Million in form of national government conditional grants. The deviation from the mean of the conditional revenue from national government was relatively larger as supported by a standard deviation of 354 Million.

The mean of conditional revenue from the development partners was 577 Million (standard deviation =466 Million; Minimum=92 Million; Maximum=6.86 Billion). This indicates that the county governments in Kenya receive average amounts of 577 Million in form of conditional grants from the development partners. The minimum amount received from development partners is 92 Million and the maximum amount received is 6.86 Billion. The deviation from the mean of conditional revenue from development partners was relatively larger as supported by a standard deviation of 466 Million.

Table 4. 1: Descriptive Summary Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
GCP	423	1.65e+11	3.15e+11	1.29e+10	2.90e+12
ESR	423	6.45e+09	2.66e+09	1.51e+09	1.94e+10
OSR	423	7.74e+08	1.69e+09	2.02e+07	1.62e+10
NGCG	423	3.58e+08	3.54e+08	3920000	5.32e+09
DPCG	423	5.77e+08	4.66e+08	9.20e+07	6.86e+09

Source (Field data, 2022)

4.3 Pearson Correlation Analysis

Table 4.2 offers a summary of the correlation findings. The correlation between the various independent variables is examined because even though they have a high R-squared, they could still result in very large standard errors, low t-statistics, and unexpected changes in the signs or magnitudes of the coefficients. According to the pair-wise correlation matrix of the independent variables as shown in the Table below, there are no pair of variables that indicate very high correlation. As a result, multicollinearity is not an issue because the empirical model is made to ensure that the pairs are not employed in the same equation.

Results in table below indicate that equitable revenue share is positively related with gross county product($r = 0.6552$, $p < 0.05$). Consequently the higher the equitable revenue share, the higher the gross county product. The results also indicate that own source revenue is positively related with gross county product($r = 0.8581$, $p < 0.05$). Consequently the higher the own source revenue, the higher the gross county product. Results further show that own source revenue is positively related with own source revenue ($r = 0.4865$, $p < 0.05$). Therefore, the higher the own source revenue in county governments, the higher the equitable source revenue. Results in table below indicate that the conditional grants from the national government is positively related with gross county product($r = 0.3131$, $p < 0.05$). Consequently the higher the conditional grants from the national government, the higher the gross county product. The results also indicate conditional grants from the national government is positively related with equitable revenue share ($r = 0.3666$, $p < 0.05$). Consequently the higher the conditional grants from the national government, the higher the equitable share revenue.

Table 4. 2: Pearson Correlation Coefficients

	LNGCP	LNESR	LNOSR	LNNGCG	LNDPCG
LNGCP	1.0000				
LNESR	0.6552*	1.0000			
LNOSR	0.8581*	0.4866*	1.0000		
LNNGCG	0.3131*	0.3666*	0.2121*	1.0000	
LNDPCG	0.3206*	0.3269*	0.2240*	0.3371*	1.0000*

Note: * 5% significance level

Source (Field data, 2022).

The results also indicate conditional grants from the national government is positively related with own source revenue (r = 0.2121, p < 0.05). Consequently the higher the conditional grants from the national government, the higher the own source revenue. The results also indicate conditional grants from the development partners is positively related with gross county product (r = 0.3206, p < 0.05). Consequently the higher the conditional grants from the development partners, the higher the gross county product. The results also indicate conditional grants from the development partners is positively related with equitable revenue sources (r = 0.3269, p < 0.05). Consequently the higher the conditional grants from the development partners, the higher the equitable revenue sources. The results also indicate conditional grants from the development partners is positively related with own source revenue(r = 0.2240, p < 0.05). Consequently the higher the conditional grants from the development partners, the higher the own source revenue. The results also indicate conditional grants from the development partners is positively related with conditional grants from the national government (r = 0.3371, p < 0.05). Consequently the higher the conditional grants from the development partners, the higher the conditional grants from the national government.

4.4 Stationarity Results

4.4.1 Levin Lin Chu Results

From the results of Levin Lin Chu test presented in Table 4.3, County gross product, Equitable share revenue, Own source revenue, National government conditional grants and Development partners conditional grants were stationary at levels. This is because their z-statistic and p-values were significant at 5 percent critical value

Table 4. 3: Levin-Lin-Chu Unit Root Test

LEVIN-LIN-CHU UNIT ROOT TEST			
At Levels			
Individual Intercept and Trend Included			
Variables	**z-statistic**	**p-value**	**Remark**
LNCGP	-17.5059	0.0000	*I (0)*
LNESR	-16.4383	0.0000	*I (0)*
LNOSR	-18.3447	0.0000	*I (0)*
LNNGCG	-23.2868	0.0000	*I (0)*
LNDPCG	-14.2560	0.0000	*I (0)*

Note: Levin-Lin-Chu Null Hypothesis: Unit root. The test refers to inverse normal Z-statistic from the Augmented Dickey Fuller (ADF) unit root test with two lags, individual specific means, a linear time trend, and demeaned series. It assumes asymptotic normality.

Source (Field data, 2022)

4.4.2 Im-Pesaran-Shin Unit Results

The Im-Pesaran-Shin test, also known as IPS advanced by Im-Pesaran-Shin (2003) IPS, was the second panel unit root test employed. It contrasts the alternative hypothesis that panels are stationary with the null hypothesis that panels contain unit root. However, the homogeneity hypothesis employed in the prior LLC test might be excessively constrained given that panel data may include numerous cross-sections with various autoregressive coefficients (Barreira & Rodrigues, 2005). The key argument is that panel unit root tests can be biased under the alternative hypothesis if the same convergence rate occurs through entities. As a result, assuming homogeneity when cross-section data contains coefficient heterogeneity may result in incorrect inferences.

IPS test presents an alternative to overcome this restriction (Im, Pesaran & Shin., 2003). The results indicated that County gross product, equitable share revenue, own source revenue, National government conditional grants and Development partners conditional grants were stationary at levels (denoted by *I (0)* meaning integrated of order zero) with probabilities 0.000 which are less than 0.05 significance levels when intercept and trend were included in the panel unit root estimation.

Table 4. 4: Im-Pesaran-Shin Unit Root Test

IM-PESARAN-SHIN UNIT ROOT TEST			
At Levels			
Individual Intercept and Trend Included			
Variables	**z-statistic**	**p-value**	**Remark**
LNCGP	-2.5580	0.0053	*I (0)*
LNESR	-6.1486	0.0000	*I (0)*
LNOSR	-4.3657	0.0000	*I (0)*
LNNGCG	-6.1189	0.0000	*I (0)*
LNDPCG	-3.551	0.0002	*I (0)*

Note: Im-Pesaran-Shin Null Hypothesis: Unit root. It uses IPS-t-bar statistic calculated based on a maximum of one lag chosen by the Akaike Information Criterion (AIC) with individual specific effects, a linear time trend, and demeaned series.

Source (Field data, 2022)

4.5 Robustness and Diagnostic Tests

In order to eliminate the possibilities of spurious regression problems, various robustness tests were carried. These tests include normality test, multicollinearity, serial correlation test and heteroscedasticity test

4.5.1 Normality Test

In order to determine whether the residuals were normally distributed, the Jarque-Bera test was performed; if the p-value was less than the Chi (2) value, the null hypothesis cannot be disproved. "Residuals of variables were normally distributed" was the Jarque-Bera test's null hypothesis (Ho). As opposed to alternative hypothesis (H0), this claimed

that "residuals are not normally distributed". Table 4.5 demonstrates that the chi (2) p

value is .061 which was greater than 0.05 and indicates that the null hypothesis was not

ruled out. The implication was that the premise of normal distribution was not broken.

Table 4. 5: Jarque-Bera Test for Normality

Jarque-Bera	normality test:	5.38 Chi(2), p=.061
Jarque-Bera	test Ho: Data is normally distributed:	

Source (Field data, 2022)

4.5.2 Multicollinearity

Table 4.6 presents the output for multicollinearity test. VIF is used to measure the level

of collinearity between independent variables in analysis and it shows how much the

variance has been inflated. The centered VIF which is numerically identical to the ratio

of variance of the coefficient estimates divided by the variance from the coefficient

estimate of the equation with only that regressors. The calculated centered value is all

below 5, then it was concluded that there was no multicollinearity.

Table 4. 6: Test for Multicollinearity

Variable	VIF	1/VIF
Equitable share revenue	1.50	.668
Own source revenue	1.32	.758
National government conditional grants	1.23	.812
Development partners conditional grants	1.20	.0834
Mean VIF	**1.31**	

Source (Field data, 2022)

4.5.3 Serial Correlation

The residuals' serial correlation was investigated using the Durbin Watson. Serial

correlation in statistics arises when there is an association between independent variable

and a lagged version of itself over different time intervals.

Table 4. 7: Serial Correlation Results

Dependent Variable: LNGCP
Method: Panel Least Squares
Periods included: 9
Cross-sections included: 47
Total panel (balanced) observations: 423

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LNDPCG	0.066473	0.030049	2.212184	0.0275
LNESR	0.550511	0.031448	17.50562	0.0000
LNNGCG	0.037018	0.018462	2.005115	0.0456
LNOSR	0.553328	0.018462	29.97114	0.0000

R-squared	0.814930	Mean dependent var	25.30154
Adjusted R-squared	0.813605	S.D. dependent var	0.894363
S.E. of regression	0.386128	Akaike info criterion	0.944115
Sum squared resid	62.47067	Schwarz criterion	0.982388
Log likelihood	-195.6802	Hannan-Quinn criter.	0.959238
Durbin-Watson stat	1.783402		

Source (Field data, 2022)

Repeating patterns also display serial correlation when the level of variable affects its

future levels, Durbin and Watson (1951). As discussed earlier in chapter three, the

value DW statistic d ranged between 0 and 4. The value 0-1.5 implies there is positive

serial correlation, 1.5-2.5 indicating no serial correlation 2.5-4.0 then there is negative

serial correlation. The results of DW test for serial correlation are shown in Table 4.7

below. Durbin-Watson was 1.783. There was no serial correlation because when the

test statistic results are between 1.5 and 2.5, it is generally accepted that there is no

serial correlation.

4.5.4 Homoscedasticity

To check whether the residuals were heteroscedasticity, Breusch-Pagan-Godfrey was used. The null hypothesis of homoscedasticity was contrasted with the alternative hypothesis of heteroscedasticity. According to Breusch and Pagan (1979), the homoscedasticity null hypothesis is accepted if the chi-square test statistic's corresponding p value is greater than the 5% level of significance and rejected if it is lower than that mark. Table 4.8 shows the outcomes of heteroscedasticity test which demonstrate that the residuals of the model are homoscedastic. This is validated by the chi-square test findings, which have p values larger than the 5% level of significance (p value of 0.4718). This shows that the model variance is constant (homoscedastic).

Table 4. 8: Heteroskedasticity Test: Breusch-Pagan-Godfrey

F-statistic	0.881906	Prob. F(4,418)	0.4747
Obs*R-squared	3.539946	Prob. Chi-Square(4)	0.4718
Scaled explained SS	4.242105	Prob. Chi-Square(4)	0.3742

Source (Field data, 2022)

4.6 Model Estimation

Two panel models were estimated in this analysis: fixed effect and random effect. The specific individual effects are assumed to be correlated with the explanatory variables in fixed regression, although they are uncorrelated at random. Both the fixed and random models were estimated.

4.6.1 Model Selection Using Hausman Test

Fixed effects (F.E) and random effects (R.E) models are used in panel regression analysis. The Hausman test was used to choose either the regression model for fixed or random effects to test the hypothesis (Green, 2008). Hausman tests for model

misspecification, the model estimates should have different probabilities limit. This property gives the test its power.

The results presented in Table 4.9 are for Hausman test. The coefficients in first column (fixed effects) are from fixed effects estimation and in the second columns (random effects) are from random effect model. Hausman measures the null hypothesis that non-systematic differences in coefficients (random effects are suitable) against the alternative that there are systematic differences in coefficients (Fixed effects are appropriate). The results showed that value for chi-square statistic is 264.72 and its probability is .0000<.05. The null hypothesis was rejected and confirmed that the estimates from the fixed effects regression model were sufficient to be used in testing the hypotheses.

Table 4. 9: Hausman Test Results

	Coefficients			
Variables	**(b)**	**(B)**	**(b-B)**	**Sqrt (diag (V_b-V_B)**
	Fe	**Re**	**Difference**	**S. E**
LNESR	.9297	.8997	.0300	.
LNOSR	.1624	.2274	.0650	.0036
LNGCG	.0067	.0084	.0017	.
LNDPCG	.0478	.0451	.0027	.

b = consistent under H_0 and H_a; obtained from panel regression
B = inconsistent under Ha, efficient under H_0; obtained from panel regression
Fe= Fixed Effects.
Re= Random Effects

Test: H0: difference in coefficients not systematic

$$Chi2(4) = (b-B)'[V\_b-V\_B)^\wedge(-1)](b-B)$$
$$= 264.72$$
$$Prob>Chi2=.0000$$

Source (Field data, 2022)

4.6.2 Fixed Effects Estimation

The Hausman test was used to select which of the regression results (between fixed and random) were suitable for testing the hypotheses and showed that fixed effect panel regression was desirable. The fixed effect output presented by Table 4.10 indicate F-statistic of 345.59 was significant implying model was fit. The overall R- square was high at 67.82 percent. From the results, equitable share revenue (LNESR) had a positive and significant effect on gross county product ($\beta_1 = .9297, p = .000 < .05$). Further, own source revenue ($\beta_2 = .1624, p = .000 < .05$) and development partners conditional grants $\beta_4 = .0478, p = .000 < .05$ both had positive and significant effects on gross county product.

Table 4. 10: Fixed Effect Results

Fixed effects regression	Number of observations = 423			
Group variable: Year	Number of Groups: 47			
R-sq within = 0.7880	Observations per group:	Minimum	= 9	
Between = 0.6888		Average	= 9.0	
Overall = 0.6782		Maximum	= 9	
	F(4,372)	= 345.59		
Corr (μ_i, Xb) = 0.4242	Prob > F	= 0.0000		
LNGCP	**Coefficient**	**Std. Error**	**z**	**P > |z|**
LNESR	.9297	.0389	23.91	.000
LNOSR	.1624	.0214	7.60	.000
LNNGCG	.0067	.0068	.99	.324
LNDPCG	.0478	.0120	4.00	.000
Constant	.1032	.7266	.14	.887
Sigma_u	.5478			
Sigma_e	.1347			
Rho	.9430	(fraction of variance due to _u_i_)		

Note: sigma_u is the standard deviation of residuals within groups, sigma_e is the standard deviation of residuals (overall error terms), rho is the intraclass correlation.

Source (Field data, 2022)

4.7 Test of Hypotheses

The study had four objectives. To answer these objectives, the study hypothesized them and tested using 5 percent level of significance.

H_{01}: **There is no significant relationship between equitable share revenue and county gross product in Kenya.**

The first hypothesis states that there is no significant relationship between equitable share revenue and gross county product in Kenya. The fixed effect model results showed a positive and statistically significant ($\beta_1 = .9297, p = .000 < .05$). therefor this hypothesis was rejected. This implies that when revenues are shared equitably among the 47 counties, their economies will prosper. Prior to now, the majority of resources, including public institutions, were located in the major cities and urban centers. But with devolution, every county has an equal opportunity to prosper because the resource share is equal (Ngigi & Busolo 2019).

H_{02}: **There is no significant relationship between own source revenue and county gross product in Kenya.**

The second objective was hypothesized as follows: there is no significant relationship between own source revenue and gross county product in Kenya. The results of the study found that own source revenue exerts a positive and statistical significant effect on gross county product of the County Governments in Kenya. The study also rejected the hypothesis that there is no significant relationship between own source revenue and county gross product in Kenya ($\beta_2 = .1624, p = .000 < .05$).

H_{03}: There is no significant relationship between national government conditional grants sources and county gross product in Kenya.

Objective three was hypothesized that there is no significant relationship between national government conditional grants sources and county gross product in Kenya. Results indicated a positive insignificant contribution of own source revenue on gross county product ($\beta_3 = .0067, p = .321 > .05$). This implied that the null hypothesis failed to be rejected at 5 percent significance level.

H_{04}: There is no significant relationship between development partners' conditional grants sources and county gross product in Kenya.

Table 4.10 shows the findings of relationship between development partners conditional grants sources and county gross product among the 47 counties in Kenya. The results indicate that the development partners conditional grants has a significant positive relationship with county gross product ($\beta_3 = .0478$, p<0.05). These results show that a 1 unit increase in development partners' conditional grants has a .0478 unit increase in the gross county product. Thus this hypothesis was rejected and concluded that development partners contribute significantly to the growth of gross county product.

4.8 Discussion

Relationship between Equitable Share and Gross County Product

The study has showed equitable share have had a positive significant contribution to the gross county product. The results of the study corresponds to the findings of Muriithi, 2013 who concluded that to ensure both the national and county governments carry out their duties and that Kenyan citizens get the most out of public resources,

money earned nationally must be distributed fairly between them. In his study on allocations of development funds from National to County Governments, Kirimi, (2020) found that National Government funding had a considerable positive impact on the gross domestic product of the Counties. The study further suggested that more money be given to the counties because it has been shown to help them see improvements in their GDP. In praising devolution since inception in 2013, Boex & Smoke (2020) stated that Kenya's economy had grown from roughly 5.46 percent to 6.1 in 2019. The results of the study are in agreement with the resource-based theory which states that, businesses can utilize their partners' complementary resources to streamline internal operations and achieve a competitive edge in the market.

The objectives of devolution as outlined in Articles 174 and 175 of the Constitution include fostering national unity by recognizing diversity, enhancing people's self-governance, allowing communities to manage their own affairs, protecting and promoting interests and rights of minorities and the marginalized, and ensuring equitable resource sharing in order to grow the economy (Ngigi, & Busolo, 2019).

 However, Concerns have also been raised about National Treasury delays in distributing funds to the devolved units. Delays in disbursement by the National Treasury negatively impact the day-to-day operation of county activities to the extent that there are delays in the payment of county staff, suppliers, and the implementation of county work plans, programs, and development projects. This is because the total county revenue basket disbursements by the National Treasury make up a significant portion (over 70%) of the county financing requirements. As a result, this has an impact on county services provided to the counties, including health care (Engefu, Omoro, & Kiinyua, 2021).

There is also the issue of how to distribute funding among the various tiers of government in relation to the mandated roles. Based on a formula developed by the Commission on Revenue Allocation (CRA), only about 15% of national revenue is allocated to county government. The Kenyan people are not receiving enough services that should be given by both levels of government because 85% of the monies remain at the national level. Although some areas have seen a noticeable improvement, data indicates that the majority still faces marginalization. Nearly 70% of Kenyans are still living on or around the poverty line (Wangome, 2016). The findings of the study are different from the study by Kivoto (2016), who claims that some counties have higher investment returns than those with higher poverty indices and lower human resource populations.

Relationship between Own Source Revenue and Gross County Product

The results of the study found that own source revenue exerts a positive and statistical significant effect on GDP of the County Governments in Kenya. The results of the study opines with the findings of Munyua *et al.,* (2018) who concluded that through strong tax bases and taxing powers, local governments have a lot of authority to raise resources and ensure economic growth. QANCHORA, (2021) concluded that Own-source revenue (OSR) is the money a county government or subnational government produces through the collection of taxes and resource revenues, as well as through the creation of businesses and other sources of income to improve the quality of their services. According to Khadondi (2018) own source revenue is any money received by a government as a result of imposing its own fees, taxes, or other charges. It is widely acknowledged that local governments' financial stability is a key factor in ensuring that they can continue to provide public services to future generations and ensure sustainable economic growth.

The results of the study are in line with the Fiscal Federalism Theory. In order to achieve "efficiency" and "equity," the idea advocates decentralizing responsibility for expenditures while centralizing responsibility for revenues. According to Kioko, (2021) improved Own Source Revenue boosts a county's absolute revenues while also enhancing the fiscal independence of county governments and enabling them to better manage their public finances in a way that is more in line with their respective economies.

Poor project prioritization in African nations leads to poor financial sustainability, which is frequently related to strategic mistakes made during the creation of the Inter-Governmental Organizations. According to UN (2009), county governments in Nigeria rely on funds from donors or other outside support organizations to maintain their programs and projects. Torome, (2013) ascribes this to bad collection methods and holds the counties accountable for bad absorption rates and forecasting methods. A growth in the county own source revenue had a stimulating effect on the county economic development. Their study also showed that there was a growth in the productive activities among county governments in Kenya which translated to economic growth and increase in economic activities between the fiscal year 2013/2014 when devolution was implemented and the fiscal year 2020/2021. Another study by Lamaon, (2018) that was conducted in Kenya agreed with the results of this study.

Relationship between National Government Conditional Grants and Gross County Product

Table 4.10 shows the findings of relationship between national government conditional grants sources and county gross product among the 47 counties in Kenya. The results indicate that the national government conditional grants has a insignificant positive

relationship with county gross product ($\beta3 = 0067$, $\rho>0.05$). These results show that a 1 unit increase in national government conditional grants has a .0067 unit increase in the county gross product. The findings are in disagreement with those done by (Lamaon, 2018; Mbau, Iraya, Mwangi, & Njihia, 2019). According to Mbau, Iraya, Mwangi, & Njihia, (2019), there was a positive and significant effect of conditional grants from the national government on the county own revenue sources among county governments in Kenya. The findings of this study were in contradiction with the study done by Brun et.al. 2016. Their studies indicated that there was a negative significant relationship between conditional grants from the national government and the county government source revenue performance. Their studies suggests that conditions put in place by the national government while giving out grants to county governments had a powerful effect of reducing the amount of revenue raised internally by the county governments. Reduction in own source revenue among county governments would end up reducing the aggregate output in form economic performance and infrastructural development in county governments.

Relationship between Development Partners' Conditional Grants Sources and County Gross Product.

Table 4.10 shows the findings of relationship between development partners conditional grants sources and county gross product among the 47 counties in Kenya. The results indicate that the development partner's conditional grants has a significant positive relationship with county gross product. The results of this study were in contradiction with the studies conducted by Nzau (2011) on the impact of fiscal decentralization on economic growth in Kenya. Nzau (2011) states that devolved funds are conditional or matching and therefore most of the county governments have a very limited ability to allocate funds to key priority areas within their jurisdiction. These

conditional funds from development partners end up not having a stimulating effect on the economic growth among county governments in Kenya.

Another study that was conducted by Kadozi, (2019) in Rwanda on remittance inflows and economic growth indicated a positive relationship between inflows from donors and economic growth in Rwanda. This study was in agreement with this study. Kadozi, (2019) concluded that remittances from donors have a significant impact because of the institutional environment. This means that institutional quality is an important component of enhancing fiscal discipline in the use of inflows from donors and therefore boosting economic growth.

The results of this study therefore concludes that development partners conditional grants end up stimulating and accelerating the county gross product in county governments. This may be attributed to the matching fund provision provided by the donor funding from international donors. The donors can disseminate funds directly to counties as conditional grants or through the national government ministries, departments and agencies (MDA). However, these funds are usually provided by development partners with a requirement from the county government to increase accountability mechanism or improve the capacity of ensuring there is fiscal discipline in the administration of these funds. This has been the reason for the effective use of the development partners conditional grants on the economic performance of county governments in Kenya.

CHAPTER FIVE

DISCUSSION OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.1 Overview

This chapter summarizes the research findings, presents the study's conclusions, offers recommendations to decision-makers and other parties who could find the study's findings useful, and identifies areas for further research.

5.2 Summary of the Findings

The nature of performance among county governments in Kenya affects the social and economic factors such as availability of good schools, stable jobs among county people, strong social networks and health. Performance is also linked to the amount of received by the county government in the County Revenue Fund (CRF). These amounts could be the equitable share, the local revenue amounts and conditional revenue amounts from both the national government and development partners. The study dependent variable was the county gross product and the independent variables were the equitable revenue share, the local revenue sources, the conditional grants from the national government and the conditional grants from development partners. Therefore, this study's general objective was to establish the effect of devolved system of governance revenue sources and the county gross product. The results of the regression indicate a statistically positive and significant relationship between the equitable revenue source and gross county product. This relationship suggests that the higher the equitable revenue share from the national government the greater the county gross product among county governments in Kenya. These findings are supported by previous literature by Masaki (2018).

The results of the regression indicate a statistically positive and significant relationship between the local revenue sources and gross county product. This relationship suggests that the higher the local revenue sources the greater the county gross product among county governments in Kenya. These findings are contradicted the previous literature by Kosaye (2018). There was a substantial interaction between the conditional grants from national government variable among county governments and the county gross product variable. The conditional grants from national government was insignificantly positively connected to county gross product among the 47 counties in Kenya.There was a favorable relationship between the conditional grants from development partners' variable among county governments and the county gross product variable. The conditional grants from development partners was significantly positively connected to county gross product among the 47 counties in Kenya.

5.3 Conclusion

A conceptual framework for this study was developed through a comprehensive review of the literature to generate the research hypotheses. Emphasis was based on the relationship between the county revenue sources and the county gross product. Data was extracted from the county strategy fiscal papers (CSFP) fiscal report. The results indicated that the equitable6 revenue share from the national government impact county gross product positively and significantly. The results also showed that local revenue sources had a positive and significant influence on the county gross product among the 47 counties in Kenya. The findings of the study also indicated that there was a positive and significant relationship between the conditional grants from the national government and the county gross product. Finally the study concluded that there was a positive and significant relationship between conditional grants from the development partners and the county gross product.

The model projected that 67.83 percent variation in the county gross product was explained by the equitable revenue share from the national government, the local revenue sources, the conditional grants from the national government and the conditional grants from development partners. In conclusion, this study finding proved empirically the relationship between the devolved system of governance revenue sources and county gross product. This study will benefit scholars in academia and corporate world, policymakers, and practitioners will find this study useful.

5.4 Recommendations

The results of the study confirm that equitable share revenue exerts a positive influence on county gross product in Kenya. The study concludes that there should be a closer working relationship between the two levels of government for devolution to succeed. The reason is that national government has been held accountable for interfering with the devolution process and that there has been a high degree of corruption at the county governments. The study recommends that the National government should allocate more money be given to the counties because it has been shown to help them see improvements in their GCP.

The study concludes that own source revenues are good and it increases the GCP for all counties in Kenya. To encourage local governments' own income collection, the national government institutions (Senate, National Treasury, and Commission on Revenue Allocation) should think about offering additional intergovernmental grants. This will encourage more productive activities that will translate constituents' economic activity into increased own source revenue generation within the respective county governments in the form of taxes, fees, and appropriate user charges.

The study results found national government conditional grants sources to have positive and statistical significant effect on county gross product in Kenya. The recommendation is that there should be a fair distribution and shouldn't jeopardize the county government's independence in terms of budgeting, planning, and execution. The study found the coefficient of development partner's conditional grants sources to be positive and statically significant on County Gross Product in Kenya. The study therefore recommended that county government should maintain honesty in the use of finances and work to increase local revenue.

5.5 Recommendations Further Research

Other research might examine the relationship between fiscal decentralization and a sample of county governments, rather than the entire 47 Counties in Kenya. Researchers can also perform case studies of certain county governments to look at the connections between a number of other factors, including infrastructure, health, and education. This may be required given that counties vary significantly in terms of geography, population size, and very variable meteorological and physical characteristics.

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APPENDICES

Appendix I: Work Plan

ACTIVITIES	PERIOD					
	Sep-2022	Oct-2022	Nov-2022	Nov-2022	Nov 2022	Nov 2022
Proposal Preparation Problem Identification Review of Related Literature Proposal writing Production of copies for submission	▓					
Oral Defense Departmental Defense / Presentation Oral Examination at the Department		▓				
Corrections arising from Defense Submission of corrected draft			▓			
Data Collection				▓		
Data Analysis					▓	
Report Writing Submission for examination						▓