FISCAL DECENTRALIZATION, ALLOCATIVE EFFICIENCY, PUBLIC GOVERNANCE AND PERFORMANCE OF COUNTY GOVERNMENTS IN KENYA

BY

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DECLARATION

I declare that this thesis is my original work and has not been presented for a degree or any other award in this or any other University.

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DEDICATION

This Doctoral Thesis is dedicated to my dear parent Zelipha Nyambura and my nuclear family comprising of Martha, Stella, Dennis and Donald.

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LIST OF ACRONYMS AND ABBREVIATIONS

ADB	African Development Bank
ADF	Augmented Dickey Fuller
AE	Allocative Efficiency
AGO	African Governance Outlook
CACC	Constituency Aids Control Committee
CBEF	County Budget and Economic Forum
CDF	Constituencies Development Fund
CG	County Government
CP	County Performance
CRA	Commission on Revenue Allocation
CSO	Civil Society Organizations
DFID	Department of International Development
DFRD	District Focus for Rural Development
DMUs	Decision Making Units
EU	European Union
FD	Fiscal Decentralization
FLMF	Fuel Levy Maintenance Fund
FY	Financial Year
GCP	Gross County Product
GDP	Gross Domestic Product
GFS	Government Financial Statistics
GOK	Government of Kenya
HDI	Human Development Index
HIV	Human Immunodeficiency Virus
ICPAK	Institute of Certified Public Accountants of Kenya
IEA	Institute of Economic Affairs
IFMIS	Integrated Financial Management Information System
IMF	International Monetary Fund

KHRC	Kenya Human Rights Commission
KIPPRA	Kenya Institute of Public Policy and Analysis
KNBS	Kenya National Bureau of Statistics
LATF	Local Authorities Transfer Fund
MCA	Member of County Assembly
NCCK	National Council of Churches of Kenya
OCOB	Office of Controller of Budget
PG	Public Governance
SAPs	Structural Adjustment Programs
SNGs	Subnational Governments
SPAN	Social and Public Accountability Network
STATA	Statistical Data
UN-HABITAT	United Nations Human Settlements Program
Wi	Wellbeing Index

ABSTRACT

The principal objective of this study was to investigate the relationships amongst fiscal decentralization, allocative efficiency, public governance and performance of county governments in Kenya during the period spanning from 2013 – 2018. Four specific objectives were developed namely, to examine the effect of fiscal decentralization on performance and to establish the mediating effect of allocative efficiency as well as the moderating effect of public governance on the relationship between fiscal decentralization and performance of county governments. The fourth objective was to determine the joint effect of Fiscal Decentralization, Allocative Efficiency and Public Governance on Performance of county governments in Kenya were developed. Four corresponding hypothesis were formulated and tested at the 5% level of significance. The research adopted a positivist approach and deployed both correlational and descriptive design methods. The study targeted the entire population of 47 counties in Kenya and data for five years amounting to 235 data points was collected. Preliminary statistical tests were conducted and included both multiple regression analysis and correlational testing in order to determine the direction and strength of the relationships. The requisite data for study was easily available in various government offices and libraries. Measurement of the dependent variable, performance was based on proxy indicators identified as standards of living, poverty index, expenditure per capita and county contribution to national poverty. The composite indicator was the county wellbeing index while the independent variable comprised of equitable share of national government revenue, local revenue collection and conditional/unconditional transfer grants to County Governments. To test the hypothesis, both multiple and hierarchical linear regression were conducted as well as path analysis. The results indicate that there is a statistically significant relationship between fiscal decentralization and county governments performance in Kenya. Further, results indicate that the relationship between fiscal decentralization and county performance is not significantly mediated by allocative efficiency and that the relationship between fiscal decentralization and county governments performance was significantly moderated by public governance. In sum, there is a statistically significant joint effect of fiscal decentralization, allocative efficiency and public governance on the performance of county governments in Kenya. The study findings are valuable as they provide evidence which serves as a basis for policy formulation and practice by both national and county governments. The results for three hypotheses add value by corroborating theoretical predictions even though one hypothesis failed to corroborate. The findings help to assess the applicability of a number of theories such as decentralization theorem, pareto optimality in informing and shaping policy in the area of fiscal decentralization and performance of subnational governments in Kenya in order to make better predictions and judgements. A key limitation however is the challenge of attribution of effects owing to the activities of other players like national government, NGOs, and the private sector.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

In many countries around the world, governments have been undertaking reforms and deepening their systems of governance and devolving responsibilities and power over resources to lower levels at an accelerated rate (Smoke, 2003). Proponents of the move from the central to local governments have justified this by arguing that the centralized system has failed to deliver growth (Oates, 2005). Fiscal decentralization is particularly gaining currency among the developing economies. According to Bodman (2008), over the last decade an overwhelming majority of countries have adopted devolution. Shah (2006) notes that many countries are reviewing the structure of governments in order to improve services to the citizenry. For enhanced County performance to be effected, both the devolved and locally mobilized resources must be utilized to achieve allocative efficiency (CoK, 2010). However, this requires putting in place governance structures to avoid wastage and enhance accountability (NCCK, IEA, 2011). The aim of these structures is to ensure that available resources are utilized in the most prudent manner to achieve the set of objectives of subnational governments and derive the desired results for residents.

The promulgation of a devolved system of government (CoK, 2010) prompted the desire for a research to establish whether the new system will address the challenges of the previous system. Decades of clamour for improved service delivery, avoidance of wastage and enhanced accountability due to failure of central government to achieve growth targets and deliver public goods and services equitably and effectively (KHRC, 2010).

This study is anchored on various theories including Oates' (1972) Decentralization Theorem which stipulates that some goods and services are uniquely suited for some specific regions and not others. This is due to differences in tastes, preferences as well as natural endowments leading to efficiency in allocation of resources (Hallwood & MacDonald, 2010). Tiebout (1956) hypothesis contested that sub-national government use fiscal decentralization to entice individuals into their locality by "choosing with their feet". He argued that interjurisdictional competitions disciplines governments and pressurizes them to provide local public goods more efficiently. By allowing local public choice of goods and services, flexibility is encouraged which improves performance as sub-national government are then able to respond to variations in tastes and preferences.

Public governance theory is predicated on the early works of Hobbes and Lockes who wrote on social contract in the early 18th century. They argued that people have high tendency to live together in societal settings with regard to some experiments that engenders common morals and political norms of behaviour and left out what the government and the citizen can or cannot do (Manzool, 2005). They argued that people who live in a certain area or territory submit to the moral or political rights and obligations in the code of regulations or Constitution that bring them together. Pareto optimality hypothesis, developed by Vilfredo Pareto (1848 – 1923) argues that for resources to be efficiently allocated, it should be impossible to make one person well off without another losing out. This theory represents a precise definition of efficiency (Hyman, 2005); a situation where there is no room for pareto improvement.

The Robert Solow growth model developed in the 1950's also seeks to explain how financing of capital projects and higher performance are interrelated. It argues that future rates of growth of outputs depend on current investments in capital goods. The model sought to examine the relationship between a nation's long-term living standards, investments, population and economic growth based on three basic sources for GDP, namely land labour and capital. Previous studies in Kenya (Ndegwa, 2002; Menon, Mutero & Macharia, 2008; Nzau, 2014), have not shown interest in evaluating how fiscal devolution relates with the public goods provision and performance of counties. Ndegwa 2002, undertook a stock-taking study to understand the extent, pace and consequences of Fiscal Decentralization while Menon, Mutero and Macharia (2008) developed a roadmap for reforms that a broad buy-in of key stakeholders.

Nzau (2014) studied the effects of the decentralized capital and recurrent finance on the growth of the entire economy. It therefore, remains an open question as to whether fiscal decentralization actually plays a statistically significant role in enhancing or inhibiting the rate of performance of County governments in Kenya. For Fiscal Decentralization to achieve the desired results, the utilization or transformation process of available funds must be allocatively efficient in terms of production, distribution and consumption. It is only when decentralized funds are allocated and utilized efficiently and effectively and subjected to public oversight and accountability that maximum outcomes and impact can be achieved.

In the year 2010, Kenya promulgated a new constitution that introduced far-reaching reforms and a new system of governance commonly referred to as devolution. This is a highly advanced form of governance where political, fiscal, administrative and regulatory authority and responsibility are transferred from the national to sub national levels through statutory or constitutional reforms (Oates, 1972). The dearth of recent empirical studies in Kenya, linking the identified key variable jointly and their implications or effects to one another provide the motivation for this study. It is a generally accepted expectation that the level and pace of service delivery and wellbeing of citizens will be impacted in a positive way by the constitutional reforms (Ndii, 2010).

1.1.1 Fiscal Decentralization

Fiscal decentralization (FD) refers to the transfer of public finance decisions to local levels of government (Luiz & Barenstein, 2001). It is about the question of how governments at lower levels raises their resources as well as meets their ever-rising needs and how they adjust one with respect to the other. It encompasses the effects of taxation and government expenditures, public borrowing and deficit financing by governments to raise sufficient resources for their budgets. Fiscal Decentralization (FD) is generally defined as a portion of reform package for improving public sector fiscal systems for enhancing efficiency, making it competitive amongst local governments in the delivery of public goods and services aimed at accelerating economic development (Bird & Wallick, 1993).

According to Javier, Martinez and McNab (2012) fiscal decentralization is the proportionate or respective division of funds to be expended at the different tiers. Many researchers have adopted the use of this ‘budget data” obtainable from individual governments and centrally compiled by the International Monetary Fund Statistics, as well as the budget share to sub-national governments as the indicator of fiscal decentralization (Bodman, 2008). As an allocation of taxation and expenditure powers to lower levels of government, fiscal decentralization has become an established policy of many developing as well as developed countries and is boldly promoted and embraced as a development strategy by governments and institutions like IMF and the World Bank (Azfar *et al.*, 2001). According to Khaled (2018) devolution is the mechanism that transfer central government power and resources to the local level through elections that gives subnational governments some level of autonomy in the management of public affairs.

Oates (1972) argued that the subject of fiscal federalism is an extension and basic element of the concept of state structure known as federalism. State structure refers to the mechanisms in which nations of the world organize their key elements; population, territory, government and sovereignty in ways that the people approve of and benefit (Oates, 1972). The key issue of the nation are whether these crucial elements of the state are divided or undivided and the number of tiers that each government in a County has jurisdiction to exercise constitutional authority. The study noted that fiscal federalism is concerned with apportionment of decisions on how to raise and spend funds at the different levels of government. Other proponents of fiscal decentralization draw on liberal democratic principles of the states' endeavour to link decentralization to promotion of social economic development at the local level. Theory roots for the strengthening of economic systems and institutions as a prerequisite of meeting the basic needs of citizens in place of strengthening the state of political systems.

During the 1990s, fiscal decentralization reform programs and policies assumed widespread trends in Africa and developing countries. For instance Crook and Sverrison (2001) study collected evidence across a selection of African, Asian and Latin American countries for comparative analysis on the proposition that decentralization of government will make it more responsive to the needs of citizens. Zhang and Zou (2001) also sought to collate and extend the findings of previous studies that had considered the growth effect of the allocated public funds among different tiers of government The many initiatives undertaken only made progress towards achieving stated objectives of respective studies and due to lack of consensus on the conclusions and direction, this has led to extensive discourse into the desirability of fiscal decentralization and how it should be approached or designed (Muriu, 2013; ICPAK, 2014).

Wallis and Wallace (1988) identified the primary determinants of an optimal degree of fiscal decentralization as encompassing three classes of variables. These include the physical conditions and land area of the state, population size and geographical distribution as one class. The level of GDP and incomes of the people is the second while the extent of diversity of tastes and preferences for public outputs and their geographical distribution is the third. The study argued that there's a limit to the extent of a country which can be advantageously governed, or even whose government can be conveniently superintended from a single centre.

Making reference to the Musgravian model of public sector government functions for stabilization, distribution and allocation, Musgrave (1959) opined that the fiscal decentralization theory provides focus and direction for sharing these three crucial activities among the various tiers of government. The logic of the theory is anchored on the principle of subsidiarity that states that decisions ought to be handled at the lowest competent local authority possible. The objective is to focus the role of government in improving the wellbeing of individuals and households.

According to Bodman (2008) there are diverse measures of fiscal devolution while Hammond and Tosun (2009) contend that government organizations and fiscal systems mattered a lot on local economic growth, with the extent depending on the type of decentralization and the indicators expected among the lower levels of governments.

Decentralization is so multifaceted that it is not tenable to develop a testable hypothesis from the broad perspective, hence a need to embrace and define a bit narrower view, fiscal decentralization. The dimension considered regards how a mechanism can be structured for resource sharing between the various levels of governments (Cheema & Rondinelli 2007).

Fiscal decentralization is rarely undertaken alone but is often combined with political and administrative dimensions. According to Javier, Martinez and McNab (2012) fiscal decentralization is the proportionate or respective division of funds to be expended at the different tiers. Many researchers have adopted the use of this 'budget data" obtainable from individual governments and centrally compiled by the International Monetary Fund Statistics, as well as the budget share to sub-national governments as the indicator of fiscal decentralization (Bodman, 2008).

Mwenda (2010) seeks to clarify that the term fiscal decentralization has been used interchangeably with fiscal federalism which is often used by American writers and scholars, while Ndii (2010) sought to highlight the key issues of decentralization within the Kenyan context. Further, a paper by Kirira (2011) examined the 2010 Constitution and its implications for public finance management. The study called for an urgent need to build institutional and administrative structures in order to formalize the legal framework.

Article 203 (2) of the Kenyan Constitution requires not less than 15 % of all revenue collected nationally to be transferred to County governments. Other articles, 204 and 209 equally provide for mobilization of more resources as equalization funds and local charges and taxation respectively. This becomes the local revenues from imposed property rates, entertainment taxes and other fees charged for services provided. In addition, County Governments receive other conditional grants and transfers from National Government and development partners usually targeted for use in functions that are not devolved or are functions that are jointly undertaken with County Governments. On the whole, Lithgart (2015) opines that fiscal decentralization increases trust in government by the citizenry which is important for mutual benefit.

Critiques however view the adverse effects of fiscal decentralization to include inadequate funding, parochialism, threat to national unity, insufficient information, local elite capture and institutional rigidity among others (World Bank, 2003). A further argument is offered by Inman (2008) who considers that transfers of resources from National Government to Subnational Governments may not be as efficient as expected as it tends to negatively impact on revenue collections at the local level. This argument is based on the Flypaper effect which results when a dollar of exogenous grants leads to significantly greater public spending than an equivalent dollar of a citizens' income. In other words, money sticks where money hits. The result is viewed as an anomaly given that governments are taken as agents of development and service delivery by citizens.

ICPAK (2014) notes that some County governments outside the major urban centers have been dominated by powerful elite groups and individuals who hinder empowerment of local communities leading to loss of confidence in the public to the promise of the virtues and benefits of devolution. These critiques argue that the benefits of devolving political power and social equity has the propensity to destabilize the nation by encouraging certain regions and ethnic groups to begin to seek secession or even by motivating self-sufficient regions to begin to operate as autonomous states to the disadvantage of poor regions. In other words, decentralization can fan and intensify secession tendencies leading to political instability (Collins & Green, 1994).

1.1.2 Allocative Efficiency

Allocative efficiency (AE) is the core of household welfare as it measures whether or not the resource inputs are used in the most optimal proportions to generate the maximum output given market prices for both the inputs and outputs (Leibenstein, 1966). One of the basic arguments provided by Tiebout (1956) and Oates (1972, 1999) is that lower levels of government have more information than central governments about local tastes and preferences, reflecting their proximity to households. Hence they are better at preference-matching which implies higher allocative efficiency. It embraces the principle of pareto optimality and is normally measured as the distance from the benefit maximizing frontier (Badunenko, Fritsch & Stephan, 2006). The degree of correlation of services delivered and priorities of citizens is measured by how well it matches citizens' needs as expressed in their various proposals and demonstrated in the government programs and strategies for delivery.

For the fear of loss of tax revenues, subnational governments become very keen in how their meagre resources are allocated in order to enhance satisfaction of citizens within their jurisdiction (Oates, 1999). According to Kim (2008) the concept refers to a case in which allocation of limited resources is informed by consumer preferences. It measures how citizens effectively make a difference in managing decision and actions that have an impact on them through meaningful stakeholder engagements with the government, that goes beyond mere consultations to achieve higher levels of influence how policy decisions on expenditures are taken (Goetz & Gaventa, 2001). An economy that is efficient in this respect generates an "optimal mix" of goods and services. Resources are considered as being allocated in an efficient manner if the output meets people's preferences at the right price. According to Andre and Valid (2018) public financial systems and developments are those that regard issues of per capita growth, physical capital investment and continued improvement in the performance of economies leading to enhanced standards of living (Andre & Valid, 2018).

Welfare gains is promoted by implementing decentralization reforms as residents in various regions and states can decide and choose the appropriate set of public goods as well as tax regimes that conforms to their preference-matching. This means that allocative efficiency occurs when goods preferred by citizens are produced by the government at the minimum possible cost. The assumption that decentralized decision-making automatically leads to plans and activities that mirror the felt needs of citizens (Arze *et al.* 2005).

The local decision process needs to be democratic and the affected population must have a chance to make contributions. In Kenya, allocative efficiency is operationalized in accordance with the Kenyan Constitution (2010) that calls for broad engagement of citizens in the public expenditure chain and policy formulation viewed in terms of their participation in planning, budgeting, implementation and oversight of the entire service delivery chain. Formal public engagement initiatives are undertaken to help citizens come up with priorities that reflect their expected benefits. The Kenyan Constitution (2010) compels County governments to organize and facilitate ways and means of how citizens participate in the governance and allocation of available funds. Thereafter, County Governments are expected to act in a manner that is responsive to the needs and preferences of the people as expressed and proposed through the various engagements. The programs and priorities implemented are required to be the result of consultative and participative process with the residents of each subnational government so that financial outlays are linked to the stated expected outcomes and benefits.

Literature suggests that decentralization tends to improve allocative efficiency owing to the improved matching of local needs (Javier, Martinez-Vasquez and McNab, 2012). In relation to decentralization, a pareto efficient allocation is not a sufficient condition because one person would be made better off at the expense of another person in a particular locality (Taylor, 1993). Efficiency takes place when the government offers goods and services most valued by citizenry and limited resources are applied to the production of goods and services to meet public needs in the best way possible (Musgrave, 1959).

The main challenge as far as decentralization is concerned has been how to design the best structure in which to assign responsibilities to lower government levels and the attendant financial resources to support the same (Salami, 2011). Ehtisham, Ahmad and Brosio (2009) undertook a cross country study synthesizing and highlighting some critical elements from previous selected studies that were needed to properly assess the outcomes of decentralization with focus on distributional issues and poverty reduction. Similarly, UN-Habitat (2002) conducted a study in select African nations to examine a variety of issues that needed to be analysed with respect to local democracy as it is related to decentralization.

1.1.3 Public Governance

Public Governance (PG) refers to the way in which influence and authority are applied in the use of public resources to ensure social economic advancement in a given country (Sanjai & Brian, 2008). It is a vital ingredient in the efficient production of goods and services and is an ideal for every society though it may not be totally realizable. Public governance has been a key objective in most reform programs implemented in recent years around the world and is a continuum of two extremes (either good or bad) and not necessarily unidirectional (World Bank, 1992).

Good public governance is a necessary condition in the maintenance of order and equity in any society, optimal production of goods, control in the exercise of state power, regard for justice and retention of orderly society (NCCK, IEA, 2011). It is a system where various actors in society exercise power, authority to influence and enact policies and laws that impact public life and social activities (Heinrich & Lynn, 2005). The process is about creative interventions by political and governments actors as well as other policy makers to influence structures and systems that affect the expression, desire or human potential in the efficient management of available resources (NCCK, IEA, 2011). Bad public governance is a situation where power and authority are abused in their exercise, there is no regards for justice or maintenance of order in society which results inefficient production and slowed delivery of public goods.

Countries that have already achieved macro-economic stability through the first phase of reforms have designed a second phase of reforms to uplift institutions that advocate for good public governance which is an ideal for every society (Luiz & Barenstein, 2001). The United Nations considers the exercise of good public governance as process that is participatory, transparent as well as accountable. The process is expected to incorporate various state institutions and the modalities of how they operate and should also include NGOs, other non-state actors like civil society organizations and voluntary organizations (UN, 2007).

Decentralized public governance occurs where each subnational government is managed by a common agent acting on behalf of all citizens. Under completely transparent systems, decentralized governance determines a rational and fair allocation of resources, assuming that the state of technology in each region is common knowledge and aims at maximizing the households' utility function as provided by Samuelson's rule (Luciano, 2011).

To improve governance, emphasis is placed on judicial reforms, accountability, political instability, waging fight against corruption, enhancing human capital and quality of bureaucracy to enable government execute its mandate, and strengthening the rule of law (Treisman, 2000).

Some key components identified as indicators of good public governance include calibre of human personnel engaged, orientation in terms of its judicial and bureaucratic efficiency, human development index (HDI) as well as economic management aspects (Huther & Shah, 1998). Other useful and similar indicators are extracted from organizations data bases as done by Transparency International, data from Economist Intelligence Unit, OECD data among others (UN, 2007).

A country's political and social institutions determine public governance outcomes and some of these institutions have been inherited from colonial powers (IEA, 2010) implying that they mirror the structures and orientations of foreign nations. Looking globally, it's obvious that countries differ dramatically in the quality of their governments irrespective of the indices one wishes to identify to define good public governance (Seabright, 1995). Hence, as long as governments at all levels are subject to electoral accountability as a practice, where government agents make it public, and are responsible to citizens for the usage of resources at their disposal, then voters can use the performance of each subnational government as a benchmark to judge and compare with the outputs of others (Treisman, 2000). Governance is considered as good in situations where governments and organizations prudently manage public resources to correspond to the collective needs by providing public goods and services of necessary quality and quantity to its citizens (Cheema, 2005). Shortfalls to this objective translates to bad governance.

In Kenya, County governments are required to entrench democratic and accountable practices in exercising their powers and also operate in a transparent and judicious manner allowing for citizens' engagement in financial matters (CoK, 2010). These concepts involve the expression of the quality of human capacities, laying emphasis on accountability as well as legal and institutional framework. Rugo (2013), Kamau, Wambua and Mwangulu (2014) studied the effect of public engagement on the provision of decentralized goods and services in Kenya. While Rugo (2013) found that decentralized funds scored poorly on public participation and accountability, Kamau, Wambua and Mwangulu (2014) found decentralized services as being delivered more effectively and in a way that is more beneficial to local citizens.

1.1.4 County Government Performance

County Governments performance refers to the extent to which the devolved units in Kenya discharges and implements their mandates and functions as spelt in the Constitution (2010) for the benefits of the electorates. Higher outputs and enhanced performance in service delivery has been accepted almost everywhere as a major objective of policy-makers. According to Dick – Sogoe (2012), performance and development is largely a function of the objective at hand or the background of the researcher. Dick-Sogoe (2012) states that the questions to be addressed about the country's concept of development regards what has been happening to poverty, welfare, unemployment and inequality as well as progress within the population. In recent decades, certain developments have prompted countries with population size greater than 20 million to rethink their public finance management (Huther & Shah, 1995). These developments have included the collapse of communism, globalization of economic activities, democratization and clamour for basic rights, failure of central governments to deliver public goods equitably and effectively, coupled with the emergence of technological innovations.

Subnational governments' performance implies improvement in the social-economic welfare of residents, access and availability of basic facilities such as education, healthcare, water, and transport among others (CoK, 2010). Devolved governments lead to enhanced performance in the management of economic resources as the local government systems tend to be more transparent in definition and allocation of the role of various local level actors and place more emphasis on the measurement of accountability for performance results (Huther & Shah, 1998). In this sense, development is viewed as the increase in the quality of life of citizens-socially, materially, psychologically, politically and even spiritually. Clarke (2005) opines that it is important to measure the performance of County government in order to know whether the policies they implement and strategies they espouse generate progress or not and how to identify which parts/sections of their population they may be failing, as well as make comparisons with the performance of other regions. This requires enhanced provision of fiscal resources at the decentralized level in contrast to the monopolistic position of central government that presumes "one size fits all".

Development redresses the constraints of poverty, inequality, illiteracy, poor healthcare, insecurity and lack of skills that prevents individuals from realizing their full potential. The spatial inequality of healthcare and education resources, institutions and professionals are a major determinant to the costs of delivering these key services and ultimately affects productivity and potential economic growth of nations (Xueqian *et al*., 2019). Performance measurement in the context of public sector seeks to improve transparency, accountability, innovation, quality of policy and decision making process as well as output quality and quantity, efficiency and effectiveness, equity and impact (Precious *et al*., (2017). There is however limited evidence on an agreed framework for the determinants of performance in public organizations (Precious *et al*., (2017).

Devolved systems of government face competitive strategies and manoeuvres from their neighbours which challenges them to become more competitive and innovative in the delivery of public goods. Further, locals tend to desire a higher level of incentives to participate in various activities of community life in order to find solutions to both individual and communal choices (Kimenyi, 2000) as quoted by Mwenda and NCCK (2011). A major objective for decentralized governance is to enhance the performance in the management of resources at the lower levels and to achieve higher rates of growth and development for residents.

Blair (2000) concluded that subnational governance impacts positively on the quality of service delivery particularly in refocusing in government from a command and control authority to a service-driven provider’s role. Changes in public goods provision can be measured in terms of investment inputs of resources expended in productive capital projects as well as social infrastructure that supports and confers value and benefits to the citizens in the right qualities and amounts (Usman, 2011). This calls for involvement of residents in preference-matching and continuous monitoring to ensure efficiency and accountability as well as avoidance of wastage.

According to DFID (2011), there are different approaches to assessing economic performance, but the widely accepted definition is the long run productive capacity of a country, which is normally measured in terms of GDP. Policy makers in counties normally focus on expenditure per capita, level of employment, and proximity to basic infrastructure in order to influence the living standards of citizens (World Bank, 2000). There exists a broad category of approaches called basic needs accounts or capability accounts of wellbeing; the most well-known approach is the UNs' Human Development Index (HDI) which identifies the concept of wellbeing as resting upon three factors: income levels and distribution, education levels and health standards. These factors are in turn operationalized using objective data as expenditures per capita, literacy levels and enrolment rates, as well as life expectancy at birth and morbidity rates.

Another approach of wellbeing measure is in accordance with UNICEF's report on children’s wellbeing applied in all OECD countries (Abdalla, 2008). These approaches operationalize wellbeing using data based on humanistic theories based on Maslows Hierarchy of Needs or Max Webers Needs Theory. The advantage of this measure is that it is more transparent to policy, it is multidimensional and plenty of official data is already available (Abdalla, 2008). It is important however to note that it is challenging to incorporate some subjective aspects of wellbeing such as happiness, expectations and self-esteem Clarke (2005). In a research paper presented to the World Economic Forum, Christopher (2018) suggests that to improve people's well-being as much as possible in coming decades, policy- makers must look far beyond narrow economic calculations and prioritize non-material factors.

Since Kenya’s independence in 1963, the country has deployed various types of decentralization which has oscillated from delegation to the more comprehensive constitutional form of devolution in 2010. Changes in the living standards of residents is reflected by the well-being ranking and the poverty index in each County while the capacity and effectiveness of government to execute and provide goods and services is measured by the absorption rate of resources provided (KNBS, 2016). An increase in the absorption rate and a rise in the state of wellbeing signifies a reduction in the poverty levels of the population, leading to a reduction of the contribution made by the County to the national poverty incidence (KNBS, 2016). These statistics demonstrate the value and impact of prudent utilization of financial resources available to a County. It is a reflection of the performance of the County government over a given period of time, typically measured annually.

In this study County governments' performance is operationalized in accordance with County Budget Implementation Reports (CoB, 2014-2018) which assessed the capacity and effectiveness of County governments to execute and utilize budgeted resources; and the Spatial Dimensions of Wellbeing Reports (KNBS, 2006, 2016) which indicates changes in the wellbeing of residents as reflected by the wellbeing ranking

1.1.5 County Governments in Kenya

Choice of a governance system is basically a political decision. Once the decision has been made it affects political governance, public finance orientation, and economic wellbeing alongside the achievement of social stability (Salami, 2011). Unitary governments like Kenya before the adoption of a modern constitution in 2010, display a wide variety of decentralization practices such as the delegation, deconcentration and privatization. This implies that some countries have no lower level governments but rather decentralized administrative units of central government (Ndii, 2010). These have often operated as extensions of the central command through appointments and do not exercise autonomous powers and authority. This situation leads to most governments across the world being faced with multiple convictions that public sectors are either too large and inefficient or that they waste crucial resources (Precious et al., (2017). In the year 2010, Kenya charted the path of decentralization through constitutional reforms introducing greater fiscal powers to counties and urban authorities.

Mwenda (2010) notes that the current constitution of Kenya brought big changes in how the country is governed. The main highlight however was the paradigm shift of governance from the centre to a devolved system, made up of two tiers of government – National Government and County Governments. In case of County Governments, these are 47 in total. Decentralization as enshrined in the constitution entails a division of administrative, fiscal and political responsibilities at the two levels of government. Its primary objects include the promotion of democratic and accountable exercise of power, enhancing and fostering the tenets of national unity, conferment of powers of self-governance and engagement to grassroot levels in the promotion of a stable social and economic order. Article 176 of the Kenyan Constitution (2010), further stipulates that the counties shall further decentralize responsibilities and funds to the lowest units practicable. This is in keeping with the principle of subsidiarity as contended by Musgrave (1959). Resources will be more optimally allocated and utilized at the sub-County/ ward levels.

The main driver of clamour for devolution in Kenya was corruption, wastage and unfair distribution of resources which was a recipe for political instability (Ndii, 2010). Fiscal decentralization is expected to deliver equity in resource sharing and has a known positive influence on governance and government quality (Huther & Shah, 1998). Muoria (2011) notes that fiscal decentralization is a necessary ingredient in the retention of order and equity in any society. County governments are required to operate transparently and conduct public engagements in their decision-making. Ndegwa (2002) rated Kenya's decentralization status as third (from a sample of 30 countries in Africa). The stock-taking descriptive study focussed on governance structures, performance of institutions and financial controls at the subnational government levels within the selected African nations. South Africa was first followed by Uganda; underlining the resolve and momentum on key reform activities undertaken in the country.

While there has been piece-meal decentralization initiatives since independence, they have been characterized by central planning and command in terms of program proposals, budgeting and to a great extent implementation through centrally appointed bureaucrats. It was not until 1983 that

Kenya's effort took a more serious approach (KHRC, 2010). During that time the central government designed a delegated form of government which came to be known as District Focus for Rural Development (DFRD), which was mainly administrative, Fuel Levy Maintenance Fund (FLMF) of 1993, Local Authority Transfer Fund (LATF) in 1999, the Constituencies Development Fund (CDF) of 2003 and Rural Electrification program (Appendix III). From the year 2013, the National Government began transferring a minimum 15% of nationally collected revenue which has been most recently audited by the auditor general to the 47 Counties for use in their various programmes and projects. The amount is shared among all the counties on a set criterion that regards population size, land mass and poverty levels.

Similarly, the County governments mobilize their own revenues from local sources to supplement the transfers from the centre. This is done through local tax collection in the form of property rates, charges and various fees. The national government also continued with intergovernmental transfers of grants and other conditional funds to undertake nationally identified programs and projects within the counties (Kirira, 2011). Other budgetary allocations have also gone to sectors such as education, security, national planning and others that still remain the responsibility of central government.

A select number of counties (areas) considered marginalized further receive additional funds as provided for by article 204 of the constitution. To ensure both the devolved and locally-collected funds are utilized efficiently to achieve impact in the well-being of residents, the Constitution compels observance of the principle of openness and transparency and requires County governments to absorb as much of the available resources as practically possible. Efficient allocation and utilization of public resources, coupled with application of high quality public policies aimed at promoting socio-economic growth and the wellbeing of citizens are always the priority development objectives for governments (KNBS, 2019). This is measured through absorptive rate as well as the increase in the living standards of County residents. This reflects the respective performance of the County government.

1.2. Research Problem

Studies about possible link or interactions between fiscal decentralization and economic performance have turned inconclusive results on the actual interplay of the two variables. While in the recent past there has been heightened activity in the adoption of fiscal devolution among governments across the world (World Bank, 1999), the architecture and degree of the devolution compares differently across countries. The various elements that indicate the structure and extent of decentralization include fiscal, political, administrative and regulatory decentralization. Underperformance in achieving national objectives via centralized systems of governance, coupled with rapid political, economic and technological changes have induced and fuelled poor nations to shift from the conventional arrangement of (top-down) development planning to empower local governments and communities in planning.

Different studies, often focusing on different dimensions of decentralization often yield contradictory and inconclusive implications (Treisman, 2000). None of the empirical studies have been able to successfully and effectively delineate or clearly verify the actual or potential contribution of fiscal devolution to economic growth. Martinez-Vasquez and McNab (1997) and Thiessen (2000) argue that decentralization to subnational levels enhances production efficiency and improves innovativeness in the production of public goods and services. This leads to improved livelihoods and by extension, enhanced economic growth. Kenya has recently instituted far-reaching reforms through the enactment of a modern constitution in 2010. The reforms created 47 County governments and one unitary national government. A study on decentralized funds in Kenya, (KHRC, SPAN, 2010) could not establish why the funds failed to achieve the objective of improved living standards.

Efforts at fiscal decentralization in Kenya have mainly been at policy level targeting narrow sectors of the economy such as education, health, electricity, youth, and others resulting in studies being conducted also selectively targeting issues in those sectors. There is need for a comprehensive research targeting the entire spectrum of public finance management framework in the counties in Kenya. Bagaka (2008) conducted a study focusing on the impact of Constituency Development Fund (CDF) on the government's operating budget. He found that devolution of funds leads to efficient allocation of resources and equity, but the central government is burdened with costs. The study variables are very limited in scope while the method of analysis is not generalizable. In a comparative case study of Brazil with lessons for Kenya, Ndung'u (2014) found that for a country to ensure successful decentralization, unnecessary costs must be avoided; hence ensuring that scarce resources are efficiently allocated and that citizens participate in the process of service delivery. He used a library based method. The library method that analyzes data from Brazil does not address itself to the situation in Kenya and cannot be instructive.

Kamau, Wambua and Mwangulu (2014) used descriptive methods to study the influence of citizen participation in Kenya and found that this ensures decentralized services are better delivered to locals. Keraro *et al.* (2014) in a study of effects of governance in the design and execution of County management strategies found that resource endowment – both natural and human, significantly influence the economic growth attained by the government. Using a descriptive survey design, Nzau (2014) however found that both decentralized capital and recurrent finance contributes negatively to economic growth in Kenya.

In a stock-taking study on select African countries, Ndegwa (2002) failed to give a clear relationship between key decentralization variables and how they impact on growth and development. UN-HABITAT (2002) in a study of five Eastern African nations averred that the results and impact of effective devolution depend on each country's unique management political systems, fiscal and management structures as well as their respective policies plus the institutions place. The reality in Kenya is, however, more complex, because of a scarcity of studies conducted since the adoption of the system to either support or disapprove the impetus and implications. The dearth of empirical studies in Kenya to examine either the bivariate or multivariate relationships amongst key identified variables within the fiscal devolution framework is one of the gaps this study sought to address which is a unique area of enquiry. This therefore begs the question: Does there exist a significant relationship between fiscal decentralization and County governments' performance in Kenya?

This study distinguished itself by seeking to establish the missing pillars and explanations that would enable establishment of existing relationships. The choice of study variables is informed by extensive literature review on the theme of fiscal decentralization, which reveals that the concepts of governance, efficiency, corruption, public service delivery and national development goals are the key variables associated with devolution. While several studies have been conducted focusing on the influence of fiscal devolution on economic performance, the combined effects of incorporating allocative efficiency and public governance as key concepts in the system have not been explored. This research seeks to establish the influence of allocative efficiency and public governance when taken together with fiscal decentralization and county performance.

Nzau (2014) on the effects of fiscal decentralization on the growth of the Kenyan economy found that decentralized resources contributes negatively to growth while Kamau, Wambua & Mwangulu (2014) found that allocative efficiency ensures that services are well delivered in a manner that is beneficial to the locals. Rugo (2013) used a case study of decentralized service delivery focusing on five local authorities and found that decentralized funds have scored poorly on accountability as preference-matching is minimal and hardly effective. The study uses panel datasets for five years and employs a descriptive research design and correlational as well as regressional techniques for analysis.

Therefore, this study intends to bridge this gap by addressing the question: What is the relationship among fiscal decentralization, allocative efficiency and public governance when jointly assessed against the performance of County governments in Kenya? The motivation of this question emanates from conflicting theoretical perspectives. Oates (1972) perspective considers that fiscal federalism will lead to improved performance while Inman (2008) Fly Paper perspective considers the opposite.

1.3 Research Objectives

The overriding aim of this study was to investigate the relationship among fiscal decentralization, allocative efficiency, public governance and how they relate with the performance of County governments in Kenya.

More specifically, the study focussed on the following objectives:

i. Examine the effect of fiscal decentralization on performance of County Governments in Kenya

ii. Establish the effect of allocative efficiency on the relationship between fiscal decentralization and performance of County Governments in Kenya

iii. Determine the effect of public governance on the relationship between fiscal decentralization and performance of County Governments in Kenya

iv. Investigate the joint effect of fiscal decentralization, allocative efficiency and public governance on performance of County Governments in Kenya

1.4 Value of the Study

The outcome of this research makes invaluable contribution to the body of knowledge and literature, particularly in the area of public finance and devolution. Many similar studies have tended to focus on the developed economies whose historical backgrounds and motives are quite different from the prevailing circumstances in Kenya and developing countries. Furthermore, many of the studies undertaken have focused on only two variables. The Kenyan context is even worse as there is scarcity of literature on the subject matter, particularly on the relationships between allocative efficiency and performance as well as public governance and performance.

More specifically, the results of this study firstly, help illustrate and demonstrate the current trends and dynamics regarding the variables as well as reveals the state of play in Kenya. Secondly, the findings of the study helps to test the applicability of a number of theories such as the Solow Growth Model, Decentralization Theorem and the Pareto efficiency Theory. The results also help validate and critique the conclusions and observations of previous study results. In addition, the results of this research offer crucial lessons for other scholars and researchers by introducing a multifaceted approach and multivariate models to the determinants of County governments' performance in public service delivery. Policy makers at the County level can also find the results of this study handy in guiding the formulation of an apt mix of fiscal prescriptions to adopt in guiding expenditure and revenue mobilization to ensure equity and stability.

The research recognizes that fiscal decentralization and its implications is a slow and controversial process as it is the first time it is being implemented in Kenya. Moreover, its execution is complex, with far-reaching disruptions in the public finance management structures and procedures and requires careful attention. Accountability and responsibility for performance and outcomes is equally likely to be a vexed subject with various units/levels of government competing with one another for credit while at the same time laying blame on others when things don't work out.

This empirical study lays a firm foundation for future researchers on the myriad implications and consequences of fiscal devolution on the all-important subject of delivery of public goods within County governments. In practice, the study findings also point to the need for the national government to increase resources being devolved to the counties from current minimum of 15% to more than double this figure. This is to ensure the impact in terms of wellbeing of citizens at the county level is accelerated. The research makes a major contribution by adopting a positivist approach and a research design that relied on panel dataset for cross-sectional and time series analysis.

The study offers additional insights and a better understanding of the impact of fiscal decentralization and helps avoid guesswork and ambiguity in financial planning strategies and prudent utilization of scarce resources. Researchers can be able to disentangle and isolate specific variables of interest and commit them to more rigorous and in-depth examination to determine their roles/relevance in the broader framework of national development. Finally, the study results provides a pivotal contribution by applying analytical models that can help predict outcomes simultaneously when compared to previous bivariate models. This helps to either validate, critique or generalize the various theoretical models prescribed in the study.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter provides a discourse of the various theories of fiscal decentralization and economic performance. Further, a critical and analytical review of the previous empirical studies on the subject in Kenya as well as determination of research gaps is presented. In addition, a conceptual framework illustrating the inter-relationships between the study variables is also presented.

2.2 Theoretical Foundation

The underpinning theories of fiscal decentralization are a dichotomy of two extremes categorized simply as the "traditional" and "modern" theories viewed against the backdrop of social-economic performance. The earlier theories lay emphasis on the merits of centralization of funds, while the modern theories advocate for the decentralization of funds.

2.2.1 Traditional Theory of Fiscal Decentralization

The mainline perspectives of decentralization are associated with the public finance theory that dominated in the 1950s and 1960s. At the centre of this early school of thought was Musgrave (1959) in what famously came to be known as the "Musgravian branches" of governmental economic functions of allocation, distribution and stabilization. The traditional view of decentralization argues that the national government should control macroeconomic management responsibilities as well as redistribution of income for the benefit of the poor.

Proponents of this view and development economists discouraged decentralization by advising central control over the economy. They employed development strategies mainly anchored on command planning, grandiose technological transfer, industrialization and regional centralization to take advantage of scale-economies and subsequent growth. Smoke (2001) viewed centralization as a tendency that existed where the centrifugal forces are permanent and secular, encompassing all ages towards aggregation of the public sector.

This implied development responsibilities were chiefly coordinated from the centre leaving subnational authorities largely neglected on account of dearth of managerial and technical capacities in many developing countries. (World Bank, 1989; Rondinelli & Nellis, 1986). But the most important and more legitimate reasons for neglecting and opposing lower level governments is the need for building national unity and achieving macro-economic stability especially in fragile economies that also happen to be ethnically fragmented. Further, the governing elite fear the loss of power and wealth as well as competition for qualified staff with decentralized, autonomous authorities.

The trend towards centralization was hastened in the first half of the 20th Century by unprecedented upheavals including the first and the second world wars and the great depression. These developments placed huge demands on central governments (Prud'homme, 1995). Their violent social economic disruptions produced a predominant role for central governments that took long to be relinquished (Peacock & Wiseman 1961). Musgrave (1959) further opined that governments are established to control people within a particular jurisdiction and offer essential goods and services. These goods and services commonly referred to as public goods confer benefits for common use by a society and cannot be withheld from those who do not pay. The citizenry (consumer) expects to be offered essential goods and services by the government but in return pay taxes. The government should offer those goods and services that meet the citizens' preferences.

Faguet (2004) and Smith (1985) contends that the authority to make fiscal decisions is best left to the central government since sub national governments lack resources whether human, technical, or financial such that they cannot appropriately offer the requisite services to the citizenry. One of the main deterrents pointed out is the attendant high administrative costs due to lack of economies of scale at the sub national level. In addition, a centralized system is regarded as superior as far as productive efficiency goes. Bahl and Linn (1992) wrote that centralization is good for productive efficiency where economies of scale are needed. Prud'homme (1995) favours a centralised system by arguing that national governments are able to invest in production capacity to a greater extent hence enhancing efficiency. It's further held that the national office is more prestigious and powerful, and attracts high quality bureaucrats whose efforts may be greater because the rewards are larger (Persson & Tabellini, 2000).

However, proponents of this theory operate under assumptions of a closed economy, homogeneity of jurisdictions and existence of democratic governments. They further assume that those elected to make decisions have the capacity to analyse and/or prioritize the myriad needs that suit the public. This is contrary to our case context – Kenya, where counties and County governments are significantly different both in size of governments as well as geography and natural resource endowments. Fiscal system ratios for majority of developed nations have apparently picked in the 1950s but have since actually declined modestly (Oates 1975). Oates (1972, 1985) study on a sample of 58 countries found a negative correlation between fiscal centralization and levels of per capita incomes while central governments in developing countries assume the lion share of fiscal responsibilities.

The theory can serve as a point of reference or comparison of the impact of centralized economies and decentralized governments on the performance of County governments in Kenya.

The theory helps the author to delineate, examine and assess the dynamics and role of fiscal decentralization and also enables to design appropriate indicators that best reflect the fiscal and institutional systems, as well as political processes that assign authority to the various organs of raising taxes and undertaking public expenditures. Given that this theory makes crucial assumptions as noted earlier, the expected relationship amongst the variables would be negative.

2.2.2 Modern Theory of Fiscal Decentralization

Oates (1972) decentralization theorem underpins the cardinal role and significance of the independent variable in this study, fiscal decentralization. The theory holds that there are some goods and services that are uniquely suited for specific regions and hence they could be best provided if revenue raising power and authority to plan and incur expenditure were transferred to regional levels. The theory argues that both policies and strategies that are designed to provide for public goods as well as human capital needs to be sensitive to regional and local conditions in order to be more effective in achieving desired objectives than those determined and implemented from the centre and tends to ignore geographical, cultural and religious differences.

This argument is reinforced by Tiebout (1956) and Oates (2005) who further claim that decentralization improves allocative efficiency, given that subnational units have more information than central governments about local preferences, reflecting their proximity to households. This enhances preference matching in the provision of public goods, which not only improves efficiency but also accountability.

Fiscal decentralization is hardly undertaken singly but is often accompanied by other reform measures that are either administrative or political in nature. The main objective of fiscal decentralization is to take decision-making on public revenues and expenditures closer to the people. It leads to more rational and prudent service provision by deploying local knowledge and information. It can also resort to enhanced public engagements and hence leads to greater support for government leading to improved political stability. Citizens have closer links with local institutions and can manage them more efficiently and responsibly (Bird & Vaillancourt, 1998). This aspect accompanied by enhanced mobilization of resources, reduced reliance on national funding, greater accountability and more responsiveness from government makes fiscal decentralization seem intrinsically valuable.

Shifting of more powers and authority to local level governments is viewed as a strategy of breaking the ‘grip’ of national planning and mismanagement that has plagued efforts to set developing countries on a trajectory of self-sustaining growth. De Volk (1990) points out that the resurgence and pursuit of fiscal decentralization have tended to have less emphasis on political aspects and focussed more on concerns of enhancing effectiveness and efficiency in development planning and implementation. Traditional systems in parts of the world, especially Asia, have been highly centralized for centuries. In the developing world, fiscal decentralization was introduced mainly through colonization as support for development that often failed to meet the intended purpose as well as acceptance by the local people (Mawhood, 1987). The theory focusses on the various systems of fiscal transfers and cooperation in the division of public revenues amongst all tiers of both national and sub-national governments. It’s about assigning clear expenditure and revenue responsibilities, intergovernmental fiscal transfers as well as authorization for borrowing through loan guarantees from central government (UNDP, 2005).

Conyers (1990) stresses that the systems of most developing countries were derived mainly from centralized systems of governments that were previously their colonial masters and tended to maintain the same in the initial years of independence. But as citizens got more informed and educated through more improved channels of communication and also became more aware of central government bureaucracies, they have moved a step further in endeavours to take the control of some government functions that directly impact them. Hence, they have ensured that undemocratic governments and those led through dictatorships are disobeyed and compelled to cede power by commencement of political reforms (Diamond, 1997 & Manor, 1998). The principal issue here is how to reconcile the decisions of politicians and civil servants (agents) with those of the locals (principal). What is emerging is that development objectives by many lowly developed nations have not succeeded in promoting adequate growth and equity. Further, Peterson *et al.* (1991) notes that international economic conditions and strategies such as Structural Adjustment Programs (SAP's) aimed at improving service delivery in the public sector have occasioned enormous fiscal difficulties in these countries in addition to the clamour for greater democratization (World Development Report, 1999/2000).

According to Diamantaras and Gilles (1996) fiscal decentralization leads to allocative efficiency under certain conditions noting that inter-regional competition could achieve the twin benefits of encouraging enterprise and avoiding wastage in spending. Martinez-Vazquez and McNab (1997) conducted a research on effects of fiscal decentralization on the pattern of government spending. The study found that there is usually a tendency to increase government spending on private goods. They opined that decentralization is defensible because it enhances economic efficiency perspective due to the fact that it is possible for the government to offer what the citizens prefer and similarly helps accommodate variations in tastes and preference (Oates, 1972).

Conyers (1990) contends that devolution could rope in the local electorates in decision making implying better social welfare and outcomes than alternative systems. Seabright (1995), Luiz and Barenstein (2001) contend that fiscal decentralization can strengthen social capital and accountability owing to the fact that it enhances the proximity amongst representatives and the electorate, noting that each local leader has to win an election in their respective jurisdiction. These public interventions imply that policies aimed at providing public goods and services such as infrastructure, health and education that reflect and relate to local conditions are bound to yield more effective results in fostering growth than those designed or determined at the central level, cet par (Oates, 2005).

The renewed focus for greater fiscal role for subnational governments has attracted enormous support from international development partners (World Development Report, 1988/1989 & 1999/2000). This is particularly crucial for Kenya where the principle of public engagement is a major requirement in decision-making in order to accommodate different tastes and preferences in the counties. While significant control over certain functions is still retained at the centre, County governments are managed to a great extent by locally elected officials and local County assembly members. However, though many theoretical discussions have favoured fiscal decentralization, there's not enough empirical evidence to support this hypothesis. Proponents of this theory make the assumption that subnational governments have the requisite capacity to achieve high levels of productive efficiencies to avoid wastage and create innovations relevant to the regions. A key criticism by Faguet and Smith (1985) however, states that decentralization can be costly due to diseconomies of scale. Smith (1985) further argues that subnational governments tend to lack adequate resources; whether human, technical or financial such that they are unable to appropriately offer the requisite goods and services to the citizenry.

This theory applies and relates well to this research which seeks to establish whether decentralized funds achieve significant impact in County governments' performance in public goods provision. The theory lays emphasis on citizens' engagement in preference setting as locals have superior knowledge of their needs and can be expected to be more accountable. The study reveals the advantages of devolving mandates to local levels and the clear relationships between County governments and the residents/beneficiaries. The expectation is that fiscal decentralization is positively associated with allocative efficiency, public governance and County Governments' performance.

2.2.3 Allocative (Pareto) Efficiency Theory

This theory is predicated on the logic that an efficient allocation of resources occurs if it is impossible to make a person well off without another person losing out. Otherwise if it is possible to make someone's position better without worsening someone else's position, then the allocation of resources is said not to be efficient. In this context an efficient allocation is known as Pareto optimality. This theory is named after the economist who developed it, Vilfredo Pareto (1848 - 1923), and represents a precise definition of efficiency (Hyman, 2005). A situation where there is no room of Pareto improvements is also said to be allocatively efficient. In terms of technical efficiency, allocative efficiency refers to the degree to which an organization or entity utilizes the inputs in various combinations while taking into account the level of technology and market prices. It is about maximizing outcomes by employing a variety of technically efficient ratios of resource inputs.

The joint application of both technical and allocative efficiency tools yield economic efficiency which is variously referred to as productive efficiency (Farrell, 1957, Worthington, 2009). Efficiency has three dimensions, that is, efficiency in consumption, production and in distribution (Liebenstein, 1966). Theoretical arguments in favour of this view stress that allocative efficiency increases productive efficiency and integrity, and improves cost recovery through taxation (Azfar *et al.*, 2001).

It is generally accepted in both theory and practice that under certain conditions and for certain public goods, greater allocative and producer efficiencies are realized through decentralized expenditures (Martinez, McNab, 2003). This is so because local governments can better discern local preferences and needs and can produce the same goods at lower costs, leading to high economic growth (Limi, 2005). The allocative efficiency variable is also a measure of public engagement in determining how public needs and preferences are responded to by the government and assessing accountability of resource usage. In the absence of market forces and competitive pricing policies for public goods and services, community-wide demand is conceptualized by means of a participatory decision-making process i.e. either via voting or public engagement (Wallis & Oates, 1988). Priority-setting for the available budget is the single most important means through which an entity or organization can implement its agenda. An entity can draw a very good expenditure plan but is confronted by the challenges of execution processes such as procurement, human capital, fiscal indiscipline and general inefficiencies.

Allocative efficiency accommodates heterogeneity in preferences for public goods and services, hence justifying the principle of subsidiarity from an economic-efficiency perspective (Tiebout, 1956, Oates, 1972). Further, when there are more local governments, there's a possibility of greater experimentation and innovation as individual county governments try to outwit one another in the provision of local public goods, potentially resulting in improvements in overall efficiency in allocation. This theory is applicable to the current study which is seeking to assess efficiency and effectiveness in resource usage in the counties in order to achieve maximum outputs of public goods and services with available budgets.

This logic of preference-matching and variation implies that in situations where opportunities for mobility exist, individuals choose to go to localities that offer a tax regime of their preference, which provides consumer efficiency. Competition among different localities might bring down costs, hence attaining producer efficiency. Musgrave (1959) and Samuelson (1954) hold that if the electorate can be compelled to demonstrate their real needs for public goods, then the proportions and mix of such goods to be produced and appropriate tax measures could easily be determined.

The notion that fiscal decentralization is related to efficiency is articulated in the work of Tiebout (1956) who stated that sub national governments use fiscal instruments to entice individuals into their locality. He argued that inter-regional competitive practices tends to discipline governments, allowing residents and businesses to exercise free mobility between regions or localities, hence pressurizing lower level governments to provide local public goods more efficiently. The implication is that decentralization unconsciously brings out secondary benefits on industriousness, surplus income and investment that impacts economic growth (Martinez-Vazquez & McNab, 1997). A performing and efficient public sector in emerging nations, hugely depends on the capacity of national governments to mobilize the resources of subnational governments to achieve efficient outcomes (Smoke, 2001).

For sub-national governments to develop prudent fiscal policies under situations of hard budget constraints while at the same time weighing the benefits against the cost of new or expanded programs, local level officials also need to have powers of raising some of the funds from their respective jurisdictions (Salami, 2011). A heavy reliance of transfers from the centre creates incentives of an expansionist lower level government rather than focus on increasing fiscal capacity and tax base in one’s own jurisdiction (Bahl & Sally, 2007). This calls for creation of mechanisms and institutions for decision making that provide the requisite incentives for rational budgetary choices. This has a direct effect on both the intervening and moderating variables in this study, as individuals can choose which counties to work for and where to live, depending on the incentives and attractions available in each County. This is akin to horizontal competition for mobile factors. In so doing, individuals divulge tastes and preferences for locally produced public outputs leading to pareto-efficient outcomes in the public sector (Musgrave, 1959).

Proponents of this theory make the assumptions of non-jurisdictional barriers and that individuals are highly informed and mobile across various regions. This is a view that is demonstrated in the current study context by seeking to assess the extent of government responsiveness to the needs and concerns raised by citizens in their pursuit of improved living standards. It holds that allowing local public choice of goods and services enhances flexibility and improves efficiency as governments can then be able to respond to variations in tastes and the transactional costs as well since external costs of political actions are likely to be low (Faguet, 2002).

Critiques however argue that the assumption that local officials have the requisite capacity and skills to execute the necessary mandates may not necessarily hold across counties. Furthermore, certain indicators may not be held constant at all times as there is some level of competition between the counties. Other critiques hold the view that a specification problem of omitted variable may lead to failure to correlate effects and inputs properly (Inman, 2008) leading to biased results.

2.2.4 Public Governance Theory

Public governance refers to the design, formulation and effective execution of public policies and management styles across organizations and other sectors of society and the study of governance coalesces around a couple of theoretic paradigms variously referred to as the rational choice and sociological institutionalism (Stephen, 2013). As the former focuses on analysis of interests of actors and the information available to them, the latter seeks to investigate the possible joint relationships and customs.

This proposition is supported by Gerry (2000) who focussed on the theory of governance reflecting the social-political scientists in a shifting pattern in the styles of governing. Rhodes (1996) opines that in the growing work on public governance, there's a changing focus in its use and importance to signify a change in the meaning of government to refer to a process of governing or changed conditions of ordered rule or even new methods by which society is governed.

Though literature reviews generally conclude that the concept of public governance ought to be viewed in various ways; and is a subject of various interpretations, there's a general concurrence that the concept implies the development of various governing and management styles where both public and private sectors interact densely making their boundaries become nearly blurred (Rhodes, 1996). Pubic governance can easily be deemed as an interactive process which involves several forms of partnerships and in this particular case, intergovernmental relations, negotiations and systemic co-ordination is adopted as opposed to others like principal-agent forms. This form of coordination and partnership also establishes a common platform of understanding that both national and county governments envision joint working modalities that lead to formation of a governance network with self-regulating controls (Rhodes, 1996). According to Dalton (2018) the theory of maximum social welfare transfers resources effected by the state through the public finance management system in order to secure the maximum social advantage from the operations which the government conducts.

Kooiman (1993) holds that the concept of public governance is about the creation of structures and systems that are difficult to impose externally but results from the interaction of a multiplicity of various actors, each influencing the actions of the other. Rhodes (1996), citing Kooiman and Van (1993) posits that this governance model is derived from the early works of Hobbes and Lockes who wrote on social contract theory in the early eighteenth century. They argued that people co-exist in communal setting in accordance with some basic agreements that sets up both moral and political norms of behaviour and points out what the government and the citizens can or cannot do (Manzoor, 2005).

Hence people who live in a certain area or territory agree to be governed by the moral and political rights and obligations as outlined in the laws or constitution that brings them together. The Constitution of a country is a shared social contract, which is applied through voluntary agreements among individuals by which a civilized and orderly society is born and vested with rights and obligations to govern and provide protection and order among its members. When a government is unable to secure the legal and the natural rights of life, liberty and property or to satisfy the general will and aspirations of society, citizens can exercise civil disobedience and can even change leadership through electoral or other means (Rawls, 1971).

The current governance order has increasingly drawn the involvement of the private sector and non-state actors in service delivery and strategic decision-making. Duties and functions that previously used to be the near exclusion of central government have been shared. Peters (1993) however contends that policy makers must keenly recognize and delineate the extent and complexity of structures and systems that link public and private sectors which can mask responsibility and add to the problems of citizens in being able to understand and influence the actions of their governments. The exercise of power to govern needs to be legitimate and any legitimacy deficit will lead to erosion of public support and commitment to programs, ultimately undermining the ability of authorities to implement resource mobilization measures and promote cooperation and partnerships, Beetham (1991). Public governance is keenly focussed on the concerns about social capital and the fundamental societal underpinnings which form the foundations for effective economic and political performance (Putman, 1993).

Apparent deficiency or lack of effective delivery of public goods has often given substance to the rise of a range of third-sector actors commonly labelled voluntary groups, NGOs, CSOs, Co-operatives and community enterprises. These cut across a wide range of socio-economic issues/themes in the realm of what has come to be termed as social economy obtaining between the market economy and the public sector. This new governance outlook requires that these non-state voluntary organizations be accorded due recognition for the scale and scope of their contributions to tackling societal challenges without reliance on government sources of financing.

Rhodes (1996) however notes that in a governance relationship, no one institution can easily command, although it can dominate a given process of exchange or public affairs. Both national, County governments and other organizations may seek to impose control over the other and this tends to create persistent tensions between the wishes of authorities and citizens on the compliance of actions.

2.2.5 Economic Growth Model

The Solow Growth Model (1956) forms the basis for modern theory of economic growth. The model holds that every government's intention is to grow their economy and improve the welfare of its people as much as possible. It refers to the enhancement of its potential to produce goods and services over time and its measure is the wellbeing of citizens or the poverty index. Lower performance of key financial indicators causes a slowdown in the rate of improvement of living standards of citizens. The Solow Growth Model of the early 1950s focused almost exclusively on the effect of growth on labourforce and capital as factors of production (Mankiw, Romer, Weil, 1992). This model sought to examine the relationship between a nation's long-term living standards, investments, population and economic growth. It has three basic sources for GDP: land, capital and knowledge, and postulates a continuous production methods that link outputs to the various inputs of capital, labour and technological progress.

Investment is referred as the formation of real capital, that can be both tangible or intangible aimed at producing a stream of public goods and services in the long run. This includes purchases of investment goods and infrastructure like roads, hospitals, sanitation, electricity, etc. Further, investments in human capital like schools, technical training institutes, universities, research and apprenticeships help in the productivity equation. Mankiw, Romer and Weil (1992) hold that the Solow Growth model predictions of the effects of savings and population growth on incomes are consistent with empirical evidence. After World War II, capital took prominence as the main factor as advanced by theorists who argued that future rates of growth of outputs depend on current investments in capital goods (Hyman, 2005). Growth of output in the economy will depend on the quantities of inputs as well as the productivity of those inputs.

It is generally agreed that for output to grow, either, the quantities of inputs must increase or the productivity level has to improve, or better still, both. The model tried to explain how capital accumulation and performance of economic units are interrelated. In the recent past the focus has been on integrating the effects of human capital, physical capital and technology in explaining economic performance. Mankiw, Romer, Weil (1992) contend that the incorporation of changes in human capital levels as an additional construct in the Solow Growth model has greater impact on incomes. The paper concluded that it appears the augmented Solow model provides an almost complete explanation of why some countries are rich and others are poor.

Critiques, however, point out that the model is unable to explain why differences in incomes between international regions exist, which failure has stimulated work on what has been called endogenous growth theories. Scholars of these recent growth theories argue that long-term growth does not depend on exogenous factors alone. They hold that to obtain endogenous growth, the economy must have increasing returns to scale or constant returns to factors that can be accumulated, emphasizing the fact that long term growth depends on more factors – both exogenous and endogenous. These endogenous-growth models are presented by their proponents as viable options to the Solow model due to its apparent inability to explain inter-jurisdictional differences in incomes (Barrow, 1989).

In the counties, performance is affected by technological progress, growth in physical capital, growth in human capital and availability of other natural endowments, all of which call for huge outlays of funds. Kenya's Vision 2030 (2007) blueprint aims to establish a socially just and equitable society devoid of extreme poverty. This objective aims to place citizens to a high level of wellbeing enough to cater for their basic needs of living a healthy, productive life. This study provides evidence of County governments' performance, the administrative/political boundaries of counties to serve as a basis for informed planning and budgeting for effective execution of their core mandate- delivery of public goods and services. The performance indicators include poverty levels, well-being ranking and County contribution of poverty to the overall incidence.

Zhang and Zou (1998) gave a theoretical framework for sharing expenditures across public sectors and government levels by using a study model which focuses on the dimension of economic performance. The import of this theory is that as citizens and governments generate more and acquire more capital stock, it enhances the quality of labour and innovation and this will have a direct and positive impact on the dependent variable of our study. The Harrod-Domar (1939) model as cited by Mankiw, Romer and Weil (1992) explains an economy’s growth rate in terms of levels of savings and productivity of capital. The model conceptualized three types of growth, namely warranted, actual and natural rate of growth. Warranted is the rate of growth where the economy neither expands indefinitely nor slows into recession, while actual rate is the real rate of increase that is actually being experienced in a country’s GDP.

The natural growth rate is the growth of an economy required to maintain full employment. It is expected that the benefits of improved County performance are shared and distributed equitably so as to trickle down to all citizens. Economic growth is one of the best tools of measuring the speed and distribution of wealth being created in a country though it is not the only parameter. At the County level exists the Gross County Product (GCP) which is the equivalent of GDP at the national level. GCP measures the size and structure of County economies and hence provides a benchmark for evaluating the growth of respective County economies over time (KNBS,2019). Economic development is however not a factor of only County government's and its administration, though the policies designed and applied go a long way in influencing and expanding their economies. This is reflected in the improvement of residents’ welfare and a decrease in poverty levels. It is therefore a challenge to measure the real changes in the socio-economic wellbeing of citizens accruing from the County governments’ expenditures because much more spending in Kenya is done by the National government as well as the private sector. Hence this study sought to examine and delineate the specific indicators associated with County governments performance in Kenya.

2.3 Review of Empirical Literature

This section presents results from previous studies about the relationships of the independent variable, fiscal decentralization and the performance of subnational governments. It also looks at the relationship between fiscal decentralization and the intervening variable, allocative efficiency, as well as the relationship between fiscal decentralization and the moderating variable which in this case is public governance. Their joint effects on the performance of subnational governments is also analysed.

2.3.1 Fiscal Decentralization and County Governments Performance

Evidence about the relationship between fiscal decentralization and performance of subnational units is enormous and covers scores of countries around the world (Balaguer-Coll, Prior & Tortosa-Ausina, 2006). This has become possible owing to the fact that the quest for fiscal decentralization has taken centre-stage in many parts of the world, including Latin America, Asian countries, Africa and throughout the formally planned economies. Some of the major catalysts for the reform changes include the demise of communism, national government’s failure to ensure equity and development, globalization of economic activities and clamour for basic rights and democratic freedoms by nations across the globe (Huther & Shah, 1995). Countries and regions that have stronger economies, exercise more open and transparent governments, exhibit higher levels of health and endowed with more natural capital have higher levels of average wellbeing (Abdalla, Johnson & Marks, 2008).

It is further observed that the most significant base for development is the local area which is underpinned by the maxim that development is lived by the people where they live, work, play and die. (Adarkwa & Diaw, 1999). County governments in Kenya should therefore make the lowest electoral areas – commonly known as Wards as the focal point for all planning, budgeting and accountability matters. When the government incurs public expenditure, some utility is created and the revenue-expenditure programme of governments should thus be adjusted in such a way as to maximize utility and minimize disutility (Dalton, 2018). It is only through a review and analysis of this revenue-expenditure program that evidence of the effect of fiscal decentralization and performance can be verified. Selected studies on the impacts and relationships between the key variables of this study and economic performance have been discussed below.

Baranky and Lockwood (2006) undertook a time-series study on fiscal federalism and its association with inputs within the education sector and outputs from 26 Swiss cantons within the period of 1982 – 2000. In their sample, the educational output in a given year was measured to be the fraction of the 19-year-aged population that achieved the grade for university admission. The choice of inputs were the basic components such as class size, per capita expenditure at both lower and higher school levels. The study findings established a robust positive association between fiscal decentralization and the provision of educational services in the sector. They further failed to find existence of any empirical evidence to support that the gains were associated with losses accruing from other measures of educational achievement. The study averred that indeed what matters is the quality of data and the right specifications of the model that will help examine the real effect of devolution on the performance of public goods provision. The study found evidence to hold that the decentralization of expenditure is more beneficial in situations where central government officials are not particularly competent.

However, the assumption that local officials have the requisite competence to execute the required mandate may not necessarily hold in all the counties, and in addition, certain indicators such as local revenue, transfer grants and others may not be held constant across board as there is some level of competition in a number of counties.

Oates' (1972) seminal paper on decentralization theorem argues that governments that formulate policies and strategies for infrastructure provision and human capital that regarded regional or local conditions tended to be more effective in enhancing economic performance than policies designed at the central government that often tended to ignore geographical and cultural differences. In a study on a sample of 58 countries, the research found that measures of fiscal centralization were negatively and significantly related with the levels of per capita incomes. The various countries range from big to small, with different multi-level governance structures which has continued to raise interesting and vexed questions on what is the most optimal design for the allocation of power and responsibility between the various levels of government. Oates (1985) posits that the more decentralized the government is, the greater the opportunity for citizens to express their desire for various public goods and the harder it is for local governments to exert higher taxes to locals as a means of financing those goods.

In another study Menon, Mutero and Macharia (2008) examined the performance of decentralized funds and functions of Kenya's five largest cities namely: Nairobi, Mombasa, Kisumu, Nakuru and Eldoret. The study employed a descriptive approach to analyzing secondary data for the five case studies. The objective was to develop a roadmap for reforms that embraces a broad buy-in of the key stakeholders. The study found very limited role of citizens at the grassroots level and that local governments accounted for only 3 percent of revenues and expenditures in those cities in 2012. The study was however limited in the fact that it focused only on the performance of the five (5) major cities and cannot therefore be generalized to reflect the performance of the rural areas where the majority of Kenyans are to be found. Furthermore the study examined only one variable - revenue collection for a short period of one (1) year. And though fiscal decentralization is expected to enhance the performance of public sector in terms of efficiency, accountability, transparency and policy-making, its attendant complexity in intergovernmental fiscal relations easily result in co-ordination failures with serious bearing on fiscal positions of both National and County governments (ICPAK, 2014).

The case often canvassed by scholars and political analysts for subnational governments' superior understanding of local priorities and preferences includes greater recognition of local level demands, enhanced access to local lobby groups and a sense of greater political responsibility and accountability to the public. This happens in ways that incorporate and involve participative planning techniques that give the private sector and non-state actors an active and vibrant role (Faguet, 2002). These factors have not been recognized by central governments.

Further empirical literature on the relationship between fiscal decentralization and performance of subnational units in the East African region has been emerging slowly and a few available studies have been discussed below.

Nzau (2014) analyzed the effects of devolution by analysing the effect of decentralized funds on the growth of the Kenyan economy based on a time series annual data covering the period 1993 – 2012. The measure of fiscal decentralization used in the model was devolved finance disintegrated in terms of capital finance and recurrent finance. Economic performance was measured using GDP. Ordinary Least Squares Method was applied to estimate the components of the regression model. The results revealed that the variations in performance over the study period were mainly attributed to the variables in the model. Regression results indicated that both decentralized capital finance and decentralized recurrent finance contributes negatively to growth. It was concluded that contribution of devolved funds to economic growth was insignificant during the period under review. This study failed to consider other crucial variables like the legal and institutional framework through which the devolved funds were to be utilized.

Ndung'u (2014) analyzed the impact of devolution in Kenya if he adopted a decentralised government. The research was a case study of Brazil aimed at informing Kenya's decision to adopt devolution as a developing country. The research was based on an extensive literature review of the Brazilian case. The study employed library-based methodology. Qualitative methods were used to analyze the data. The study concluded that for successful devolution, the key focus must be in minimization of costs and wastage. Governance structures must be reviewed or some done away with. The research addressed only two variables of devolution and governance. The context of study is, however, that of a more developed and huge economy and the lessons learnt may not be easy to apply or replicate in the current case.

Ndegwa (2002) conducted an overview study of the status of devolution in the African context by examining the World Bank working papers in 30 countries. The research details the state of devolution based on specific parameters relied upon by the specialists in a survey done in early 2002. The study focused attention on governance structures, performance of institutions and financial controls at sub national levels. It was found out that the extent of devolution across the continent is distinctly demonstrated by the fact that in 19 of the 30 countries analyzed, local governments had less than 5% control of the overall public expenditure and that even the highest achievable category which was not more than 10%, is still much lower than the average of 14% in advanced economies. Further it was found that different countries sampled faired differently in the success of different elements of devolution. Kenya, Uganda, Tanzania and Rwanda were among the 30 countries in the study. Being a stocktaking, descriptive study, the research did not give a clear relation between the study variables and their likely impact on subnational governments.

UN-HABITAT (2002) did a comprehensive evaluation of the factors that are crucial for the success of local democracy and devolution in East and Southern Africa. The research targeted to offer an overview of devolution measures in five countries in the East and Southern Africa region to offer an array of different elements of devolution summarizing main issues that calls for consideration by implementers. The countries captured in the study were Uganda, Kenya, Botswana, Tanzania and Ethiopia. A narrative review methodology was followed where documents were analyzed. The outcome of the study was that the effect of devolution is hinged on issues related to design and the myriad individual political, fiscal, and administrative policies within a given country. This study was strong in the sense of being able to consider the cross-cutting issues of decentralization across countries for comparison. The methodology, however, is not rigorous and objective enough to provide findings that can be used for reference and generalization since it lacked aspects of originality.

A study by Zhang and Zou (2001) notes that on the question of fiscal decentralization and budgetary resource allocation among various tiers of government, people have to be particularly careful since it is incorrect to state that countries with more decentralized fiscals systems have higher rates of economic growth. To this end, there does not appear to exist a singular level that can be considered as the optimal degree of fiscal decentralization but variety of options depend on the relative productivity of the different levels of government. The necessary condition for a high degree of independence and performance is when counties have fiscal autonomy and discretion to set tax rates and bases freely, with the flexibility and creativity for efficient provision of goods in response to public demands (Oates, 1972; Musgrave, 1983).

2.3.2 Fiscal Decentralization, Allocative Efficiency and County Performance

The empirical literature concerning the relationship between fiscal decentralization and allocative efficiency is robust and spread wide apart. Advocates for the relationship claim that fiscal decentralization improves allocative efficiency, due to the fact that goods provided by government in lower levels will be better-matched to the needs and priorities of residents in those areas. This has come to be referred to as the preference-matching argument. It improves and increases the efficiency of delivery of public goods and services by reducing waste, corruption and poor governance (Baranky & Lockwood, 2006).

Both political leaders and advisors in the developing world have advocated for fiscal decentralization as a means of making policy and strategies that resonate with local needs and to involve local people in the management of their affairs which implies democratic governance. Subnational governments provide public goods and services taking cognisant of the size and spread of each County and the priorities and tastes of local residents so as to ensure the principle of preference-matching is achieved so that citizens who receive benefits also bear the costs (Shah, 2004). These costs can be recovered through imposition of tax measures such as fees and service charges. Here, expenditure is tied more closely to the real resource costs in small areas making accountability achievable (Abachi & Salamatu, 2012). Notably, fiscal decentralization lags behind in terms of increasing own source revenue mobilization and utilization for the intended purposes while at the same time experiencing low tax bases, weak accountability mechanisms, weak monitoring and evaluation systems and low absorption rates of centrally funded projects (Devendra *et al.*, 2018).

Besley and Coates (2003) contend that it has become a classic issue in the public finance and economic fields for the question to arise regarding how authority should provide public goods and how the costs of such provisions should be shared and assessed. This therefore calls for the need to examine how and the extent to which allocative efficiency influences the effect of fiscal decentralization on the performance of county governments. Literature on the relationships between fiscal decentralization, allocative efficiency and growth is enumerated here below.

Faguet (2002) conducted a study in Bolivia with the objective of testing how decentralization affected public investment regarding local needs in Bolivian municipalities. The design was the measurement of investment inputs in the form of finances expended and making comparisons across different sectors. The study used panel data for a ten (10) year period and identified the key indicators for measurement. Despite the anecdotal evidence and inconclusive debate on the link between fiscal decentralization and the responsiveness various levels of government, the study sought to answer this question clearly and convincingly.

A key argument used by its advocates is that decentralization makes governments more responsive to local needs by matching and reconciling levels of expenditures to the preferences of local residents. The research decomposed the main objective into two questions: whether public sector investment patterns were affected by decentralization and if so, whether this was determined by the indicators of need. The study measured the amounts of investment inputs in the form of financial resources expended on public projects and chose 10 sectors for analysis. The outputs were changes in the selected sectors of education, water, health, sanitation, etc. The conclusion was that throughout the country, public investment patterns changed unambiguously and the shifts were strongly and positively related to real local needs. However, the study examined only one main variable of allocative efficiency within a few selected sectors of expenditures within identified cities and municipalities in Bolivia, ignoring the rest of the rural areas.

In a study focusing on one of the European Union countries, Spain, Balaguer-Coll, Prior and Tortosa-Ausina (2006) sought to analyze the relationship that exists between allocative efficiency and fiscal decentralization of various competencies and capacities among local Spanish governments which were established by the constitution in 1978. Proponents for decentralization in Spain argued that the move to lower levels of government would have the multiple result of increasing both the proportion of the local public sector as well as enhancing capabilities for efficient management of both their financial needs and resources. The study focused on the evaluation of local governments as a whole in terms of decision-making units (DMU's) that organize the production processes of multiple services. They found that there existed a high number of municipalities that registered improved performance when compared with municipalities with less competencies. They also opined that over time, municipalities with more competencies were registering increasing benefits.

Taylor (1993) used cross-sectional data on communities in Hartford, Connecticut to compare resource allocation and efficiency. He relied on spatial autocorrelation techniques to control for any benefit spillovers among same jurisdictions. The estimation reveals evidence of systematic resource misallocation where communities in Hatford appear to have allocated relatively too little resources to highways and education. Using differentiation, Brueckner (1982) demonstrates that communities tend to behave in a pareto-efficient manner if the partial derivatives of residential real estate values with respect to the provision of public goods is zero for all the public goods provided. In particular, Hughes and Edwards (2000) established that inefficiencies relating to the extent of focus in government activities imply that further decentralization and reduced spending in the public sector would increase allocative efficiency.

Adan *et al.* (2008) conducted a study using a panel data of 21 OECD countries over the period 1970 to 2000. The study sought to identify the effect of fiscal decentralization on government services. Using a two-stage approach, the study computed country-specific efficiency indexes, assuming an underlying production function where public expenditure is considered as inputs and the two composite measures of performance are considered as the outputs of the public sector. In the second stage, efficiency ratios that were country-specific were regressed on a set of alternative revenues and expenditures and some control variables. Findings from the study strongly supported the evidence that fiscal decentralization had a positive and significant effect on government allocative efficiency and resultant growth.

Crook and Sverrisson (2002) conducted an analytic study of decentralization programs in twelve (12) countries in the developing world in Africa, Asia and Latin America. The study sought to compare and analyze the proposition that decentralization of government makes it more responsive to the needs of the citizen. Evidence from the study led to the conclusion that there does not exist a direct link between decentralization and the formulation of poverty-reduction policies and hence responsiveness to local needs could not be confirmed. The study method used was a literature review summary of other studies done in countries that had implemented decentralization and therefore cannot be claimed to be credible owing to reliability and accuracy issues.

However, different measures of fiscal decentralization have been used by different researchers, some using vague or incorrect determinants which may result in misleading and invalid inferences regarding policy choices and recommendations on fiscal decentralization and economic growth (Ebel and Yilmaz, 2002). Other empirical studies from Kenya obtained by the researchers are highlighted below.

Bagaka (2008) investigated the financial effects of fiscal devolution on the Kenya's operating budget. This study examined a devolved fund known as Constituency Development Fund (CDF) and how it has aided in the construction and equipping healthcare facilities at the sub national level. The research intended to find out how CDF as an indicator of fiscal decentralization affected the national government's operating budget. The variables that were considered were cost of new staff resulting from CDF projects, their pay and other employment related benefits. A nested analysis methodology was employed in this research. The findings revealed that fiscal devolution has contributed to allocative efficiency and equity but this led to increased tax demands on the national government to finance capital projects. The study, however, focused on a very minute proportion of devolved funds compared to the total national expenditure budget.

In a study to examine whether a relationship existed between fiscal devolution and the composition of various government expenditures, Martinez-Vazquez and McNab (2012) noted that the higher emphasis of expenditures on health and education not only led to enhanced allocative efficiency in welfare but also complemented national efforts towards poverty-reduction and improved economic growth.

Kamau, Wambua and Mwangulu (2014) sought to assess the influence of citizen involvement in development issues at sub national level on service delivery in the developing countries. The study sampled 150 workers, 230 individuals and 4 County Assembly Members in Kipipiri Constituency, who were randomly picked from business groups and religious leaders. The study further picked 115 individuals, 2 County Assembly Members and 75 workers of the County government. Primary data was collected through questionnaires.

Descriptive analysis techniques and regression analysis were employed to determine the effect of allocative efficiency on fair distribution of resources. The findings showed that allocative efficiency significantly ensures that resources are utilized in a manner that meets citizenry preferences in a pareto optimal way. It also ensures that devolved goods and services are much better delivered to the grassroots in a manner that confers more benefits to them and to the entire country as a whole. The scope of study was rather restricted, and a broader research over a larger area would be required to make the findings generally applicable.

Much as an increase in service delivery by the government has been associated with fiscal devolution (Alderman, 1988; Gallasso & Ravallion, 2005) it has been difficult to conduct empirical studies about the hypothesized effect of allocative efficiency due to lack of conventional measures of allocative efficiency. It is thus crucial to establish whether allocative efficiency as a mediator does play a significant role in the interplay between fiscal decentralization and County Governments' performance.

2.3.3 Fiscal Decentralization, Public Governance and County Performance

Public governance, referred to as the way in which influence and mandate are utilized and public resources managed for sustainable development of a country, has been recognized as an important element in ensuring production efficiency and efficient provision of public goods to the citizenry (Muoria & Miringu, 2011). Empirical literature on how fiscal decentralization relates with public governance and performance of County Governments is discussed below.

A study by KHRC, SPAN (2010) noted that the enhanced democratic space that Kenyans had agitated for more than 20 years heralding promulgation of the constitution (2010), was the kind that would help them become effective actors in the management and governance of local institutional affairs and activities; in short, give them a greater say in decision-making process. The study's objective was to establish how the multiple funds decentralized to the various local levels were jointly or separately managed to deliver goods and services and the extent of their involvement. The research adopted a participatory approach where various stakeholders were involved from a sample of eight (8) electoral constituencies purposively selected from the former provincial regions in Kenya. The study found that decentralized funds formed a significant portion of government budget though the objective of poverty reduction remained elusive amid huge economic inequalities. It was hoped that this would significantly improve their standards of living as well as enhance accountability. The study found that an empowered populace, through information and involvement would lead to good public governance at all levels that include the national, county, constituency and local units. The study failed to achieve its objective of establishing why decentralized funds did not lead to poverty reduction. This is possibly because it only addressed a single variable of public participation and omitted many others.

Fiscal decentralization has a known influence on governance and government quality (Huther & Shah, 1998). Rugo (2014) undertook a study in Kenya using a cross-section of secondary data from various political and administrative units to examine what had been the nature of stakeholders participation in decision making in local governments. The study sought to find out how the engagement of citizens influenced the provision of public goods at the local level and what should form the pillars of an effective and reliable framework of citizen participation in local governance in Kenya. The research found that decentralized funds scored poorly on citizen engagement and accountability leading to minimal influence on local service delivery. This view had been advanced by Cheema (2007) who noted that the drive towards fiscal decentralization has been mainly premised on increasing focus on good public governance whose key indicators are the participation of citizens, transparency, accountability, subsidiarity and separation of powers. However, the study focused on a single variable of citizens' engagement and its effect on service delivery on the limited funds allocated to local authorities. The approach effectively ignored the rest of resources that flow to the grassroots through other line government departments.

Other key characteristics of good public governance include electoral democracy, efficiency and effectiveness, equity and inclusiveness IEA, NCCK (2011). Devas and Grant (2003) posit that citizen participation can strengthen accountability and thus the public should have access to accurate reliable information in respect of the government such as locally available endowments including budgets and other financial indicators and their levels of performance. Such an arrangement is predicated on the assumption that sub-national governments will respond more positively to the needs of local populace and take their needs and aspirations into account when determining the type of public goods to be provided and how they will be optimally distributed (Robinson, 2007). It is through this extensive public-government consultations and consensus building that will help to determine the role of public governance on the effect of fiscal decentralization on the performance of county governments in Kenya.

Using sub-national data, Fisman and Gatti (2002a) have demonstrated through a study for the US and Indonesia, that fiscal devolution of expenditure is only effective in fighting corruption when backed and supplemented by commensurate authority to raise revenues. They argue that unfunded mandates only resort in sub-national government officials devising other means of raising revenues and thus should be given powers to tax as well. Politically, governance is a conceptual approach that presents a comparative analysis of the big question of a legal and constitutional nature that establish the rules of political actors and conduct through creative interventions. To achieve sustainable human development for the long term, communities and nations must continuously work towards the ideal of achieving good governance and making it a reality, though difficult. This is crucial to increasing response and accountability of local governments to the poor and to making development planning to more pro-poor (Crook & Sverrisson, 2002).

Good public governance also requires mechanisms for accounting to local citizens beyond the five-year electoral period. It calls for publicly accessible information about how resources are being utilized through the institutionalization of systems for checking by those with requisite skills like auditors and engineers so that citizens can have confidence and trust in the government (Smoke, 2003a). Theoretical literature posits that the quality of governance is improved by matching more closely goods and services with the needs of citizens, and by taking governments nearer the people they are intended to serve. This leads to greater accountability of the public sector (Huther & Shah, 1998).

2.3.4 Fiscal Decentralization, Allocative Efficiency, Public Governance and County Governments' Performance

One of the primary concerns in the world's reform agenda is the need to establish whether decentralized states provide public goods and services more or less effectively than those in more centralized states. Using a panel data set of 46 countries Davoodi and Zou (1997) investigated the relationship between fiscal decentralization and economic growth in both developing and developed countries over the period 1970 to 1989. Their findings indicated that industrialised nations had more decentralized structures in comparison to developing countries and had higher per capita GDP growth rates. Results also showed a negative association for developing nations as opposed to none for the developed countries. This finding did not correspond to the theoretical prediction that decentralization enhances production efficiency if sub-national entities can give enhanced quality or increased public goods for a given budgetary allocation level, or at a lower cost, provide the same quantities of public goods and services (Bahl, 2008). In this study which has a multiple of variables, only one of them – fiscal decentralization is similar to this study and it is deployed as dependent rather an independent variable. This therefore makes the results rather awkward to compare.

Akai and Sakata (2002) conducted a study using cross-sectional data from 50 states of the United States which the data was drawn from the current economic survey of United State to estimate the actual impact of decentralization on the growth of the economy. The results from the study showed that economic growth could not be attributed to fiscal decentralization which is a result that corroborates theoretical work. Accordingly, it can be concluded that different aspects of decentralization operate at different times and not necessarily simultaneously in any particular case. It can also be deduced that certain economies may be more decentralized in certain dimensions and not in others. The study is mainly focused on data drawn from a highly developed country-United Sates of America and the definition of fiscal decentralization is operationalized based on three tiers of government. The study used local sourced revenues expressed as a share of central level revenues.

Azfar *et al.* (1989) conducted a field study of decentralization and governance in both the Philippines and Uganda. The study specifically sought to analyse the impact of identified social and select institutional factors on decentralized public health as well as its effect on the quality of governance and delivery of education services. The study collected comparative data that could be cross-checked and analysed, and also included key informants' interviews backed by secondary data. The findings indicate that while decentralization in both studies moved authority and resources to lower levels, the local governments in both countries were not consistently responsive to local preferences though they appeared to be aware of them. Of particular concern was the presence of elite capture outside major urban centres with potentially harmful consequences for governance and public service delivery. The study further showed that as a means of effective decentralization, the engagement of citizen improves service delivery by influencing its key indicators which includes allocative efficiency, governance, accountability and reduction of poverty and equity (Robinson, 2007).

Fiscal decentralization achieves the function of improving allocative efficiency by providing the means for demand revelation which results in matching of allocations to user preferences (Robinson, 2007). While decentralization is often represented by fiscal indicators based mainly on the relative proportions of national government and local governments expenditure or revenue, the dependent variable, like performance is often given as a comparable but simple indicator of policy outcomes such as standard of living, incomes per capita, poverty levels or a composite index as wellbeing. These results call for the need to investigate the combined influence for fiscal decentralization, allocative efficiency and public governance on the performance of county governments in Kenya.

Hammond and Tosun (2006) conducted research to establish the relationship that exists between fiscal decentralization and economic growth by use of data from both urban and rural regions in the United States, more specifically the study focused on examining how fiscally decentralized systems impacted on population growth rates and per capita income growth. Their findings indicated a relatively weak or negative link between sub-national decentralization measures and local economic growth in the rural regions compared to a positive relationship in the urban regions. They also noted that there are different impacts and factors across populations and incomes within the metropolitan regions. However, the study narrowed down to analysing whether local decentralization had an impact on population growth and subsequently, real per capita income growth. The study controlled for other influences like human capital and measures of fiscal decentralization and ignored the effects of productive efficiencies and those of economic growth.

Several other researchers (Martinez-Vazquez & McNab, 1997 & Thiessen, 2000) argue that devolution of funds can improve innovativeness in the provision of public goods. If this leads to higher efficiency and performance, the better quantity and quality would lead to improved livelihoods in terms of more income and lead to improved living standards of the residents.

Gallasso and Ravallion (2001) in a detailed study on how Bangladesh operated a food supply for education in a decentralized setting and its performance using household-level information. In the study, which was on a central government program, two million children were picked in 1995-1996. The data used was from a 1995-1996 Household spending survey with a view to analysing the performance of the program. The findings were that the program was mildly pro-poor, and a somewhat larger proportion of the poor received benefits than the non-poor. Alderman (1998) conducted a household survey in 1996 by use of a database on social assistance program in Albania. He found modest gains as a result of decentralization on efficiency and effectiveness. Further, he noted that local governments make use of grassroot information in allocating the benefits accruing from the program among households as compared to ad-hoc nationally allocated funds of social assistance to local governments which are not necessarily related with poverty levels in local communities.

Ahmad and Brosio (2009), Arze, Martinez-Vazquez and McNab (2005) provide specific empirical testing of preference matching with reference to low developed countries. They analysed the impact of fiscal decentralization on the provisions of publicly provided public goods such as health, education and security. The study used 45 developed and developing countries between the period 1973 and 2000. Findings from the study revealed that decentralization led to an increase of the proportions of these two categories of expenditures, national and local levels. Faguet and Sanchez (2006) on Bolivia and Colombia assessed how decentralization was related with the composition of local exports by sector in line with the preferences of citizens and secondly, which way decentralized spending affected the outcomes in education, health, etc. (enrolment and mortality). They maintain that decentralization causes a shift in investment priorities from typical services (water and sewage, roads) to education and health which reflects felt needs and preferences. This study is entirely configured to the efficiency and performance outcomes of County Governments in Kenya since they constitute, along with their cities and municipalities, the most crucial players in the County's devolved system of governance. It is therefore imperative to examine how all the variables in the model simultaneously and separately relate to one another and to what extents.

2.4 Summary of Previous Studies and Research Gaps

The various studies reviewed have made their individual contributions in highlighting the relationship between fiscal decentralization on one hand and economic performance, allocative efficiency and public governance on the other hand. But the reviews have also established that there are knowledge gaps that still exist on this important subject. The principles and models espoused in the literature have been applied in many empirical studies across the world with varying degrees of success and/or failure depending on the context and the period of study. Much of the literature focuses on the fiscal decentralization and efficiency considerations as they affect economic performance of intergovernmental units.

Since the early 1980's, the quest for decentralization as a reform policy has been at the centre of many countries pursuing various reforms including the European Union, the United States, China, India and a large number of developing nations in Latin America and Sub-Saharan Africa. The motivations for decentralization were as different as the regions themselves ranging from the pursuit of democratization, good governance and poverty reduction in majority of African countries; regional demands for equity and autonomy in European countries and prevention of resurgence of centralization and marginalization in Latin American countries. Majority of the studies on this subject were not comprehensive enough and did not capture clearly the totality of intergovernmental structures and relationships. The contexts of the studies also vary greatly and so does the methods of data collection.

Enormous literature linking fiscal decentralization to economic performance is traceable to Oates (1993) who contended that economic growth is likely to be more rapid with decentralization if greater resources are committed to public investments such as water, health, education and infrastructure policies. Implicit in this argument is the view that fiscal decentralization results in improved allocative efficiency due to enhanced preference-matching of subnational needs and preferences. Empirically, an enormous body of work appears to suggest that under certain conditions, fiscal decentralization promotes productive efficiency (Diamantaras & Gilles, 1996). It enhances allocative efficiency through the provision of the means for 'demand revelation', thus ensuring the matching of financial allocations to user needs and preferences (Azfar *et al.*, 1999). Hence, scholars and policy-makers have jointly promoted the fiscal decentralization agenda on the conviction that decentralization leads to a more rational allocation of public goods by enabling local units which have informational advantages, to harmonise more closely their public spending choices to the needs and preferences of their electorate (Oates, 1993).

It has similarly been argued that governance is affected by fiscal decentralization in that a matching of local expenditures with revenue mobilization efforts is likely to improve accountability (Luiz & Barenstein, 1999 & 2000a). While many studies mainly isolated only two variables for investigation, it is worth noting a variety of concepts of decentralization tend to operate simultaneously in any particular situation and it is also possible that some economies may be more decentralized in certain dimensions and not in others. This makes it difficult to determine the appropriate structures or optimal ratios of fiscal decentralization between various levels, given that public goods and services, measured in terms of revenue inputs expended on various projects and programs can result in varying impacts and outcomes (Bahl & Sally, 2007).

Furthermore, there are several methodological, contextual and conceptual research gaps that need to be recognized and addressed in order to achieve credible and reliable results. The methodological gaps accrue from data collection methods as well as the operational definitions of the key variables being investigated. In the majority of developing countries, revenue and expenditure data are not standardized in terms of classifications and many researchers have had to make do with the IMF Government Financial Statistics, Household Budget Surveys and government official figures normally kept by the central government. Treisman (2000a) notes that the apparent divergence of predictions of results and contradictory conclusions should compel researchers to clearly know and delineate the variables under empirical study and the definition of fiscal decentralization adopted.

Some countries have a higher number of tiers of government than others and the more the number of tiers there are, the more decentralized the system (Ahmad & Brosio, 2009). In addition, the main parameters that are normally used to measure and estimate the values of the key variables are wide-ranging and individual researchers have focused on just a few of them depending on their objectives and study context. More developed nations and indeed more developed counties will have strong economies because of the accountability, human capacity and strength of compliance with governance framework that their government will put in place (Fisman & Gatti, 2002). This calls for establishment of credible, transparent and responsive institutions to ensure access to well researched and analyzed information and data.

Notwithstanding the number of empirical studies available, the lack of concurrence on the specific definitions and the nature of decentralization processes still makes conclusions remain tentative and context-specific in terms of expected outcomes. The contextual gap is explained by the recognition that the decentralization dimensions and structural designs differ from one country to another with huge variations between developing and advanced nations. The emphasis of hypothesized relationships and outcomes makes the context significant in Kenya where a study into the possible relationships amongst the identified four variables does not appear to have been undertaken since the introduction of the 2010 Constitution.

The conceptual gap derive from a number of reasons including inability of empirical researchers to forge a consensus on the direction and extent of causal relationships particularly between the dependent and independent variables. While claims of improvement of economic performance in the developing world may be attributed to the decentralized governance, higher levels of economic development in the more advanced nations are claimed to lead to greater efforts of decentralization. Yet another conceptual gap identified in the study is that majority of the researchers have in the past concentrated on examining the possible relationship of only two variables; for instance, fiscal decentralization and economic performance or allocative efficiency and economic growth. This study has introduced two crucial moderating and mediating variables namely, allocative efficiency and public governance that has provided more evidence.

Similarly, the County governments' performance variables should be operationalized at the County level and measured broadly in terms of County governments' performance indicators as they reflect on citizens' wellbeing and their relative levels of poverty. Theoretically, claims that decentralization enhances efficiency in service delivery and improves growth must be countered by empirical evidence that has turned inconclusive results. The knowledge gaps identified are summarized in the following **Table 2.1.:**

Table 2.1: Knowledge Gaps Identified from Empirical Studies

Author(s)	**Country**	**Objective**	**Major Findings**	**Study Gaps**	**How Study Addresses Gaps**
Xueqian (2019)	China	To analyse the distribution of health facilities, understand factors influencing those at national and local levels and their spill over effects.	• Despite increase in healthcare resources at both levels, significant inequalities remain. • Resources at National Government had more long term effects than those at subnational government level • Central government level had greater spill over effects than those at the local level	Study focussed on the health sector funding only and its effect on socio-economic welfare of citizens for a sampled population	• This study considers the entire population and addresses minimal aspects of measuring and determining socio-economic status of citizens
Andre and Valid (2018)	Germany	To establish the extent to which public guarantees may affect productivity of economic growth	• Public guarantees result in significant misallocation of resources • Bank guarantees lowers growth in productivity and ultimately lowers long term growth	The study focused on private firms and organizations in the corporate sector	• The current study focusses on the totality of the economy effects for all actors both corporate and public
Devendra *et al.*,(2018)	India	Study aimed to reveal the existing system of fiscal decentralization with special reference to composition of revenues and expenditures assignments between different tiers.	• Fiscal decentralization failed to increase the collection of local revenue. • There existed weak accountability, monitoring and evaluation mechanisms • There was low utilization of National Government resources provided.	Need to create adequate fiscal space for fiscal decentralization to ensure rural citizens benefited from inclusion in the growth and reform effort.	• Study was a review of existing systems and structures from secondary data while this study is a correlation research on the relationship between the key determinants of decentralization.

Khaled (2018)	Egypt	To establish the extent to which fiscal decentralization can influence the implementation of SDGs	• All fiscal decentralization key components had an effect on SDG goals • The role of National Government cannot be completely ignored • There is need to enhance local revenue to supplement other sources of financing SDGs.	The study focussed exclusively on SDGs	• Current study lays emphasis on all aspects of human welfare as reflected by a composite measure.
Precious *et al.*, (2017)	South Africa	To review the implementation of management performance assessment tool and find how it was executed at the central level	• Results noted the critical component of implementation to include socio-political environment, appropriate legal reforms, understanding implementation factors and organizational culture	Study was a review of an implementation tool without assessing its impact and influence to wellbeing indicators	• Current study seeks to offer a link between public resource utilization and its effect on citizens in terms of wellbeing
Kamau, Wambua and Mwangulu (2014)	Kenya	The effect of public engagement on provision of decentralized services in developing countries	• Allocative efficiency ensures that decentralized services are well delivered in a way that is beneficial to them and also to the whole country as a whole.	Did not test for reverse causality.	• Study to use both descriptive and hypothesis testing. • Study will establish the direction of relationships between the variables.
Ndung'u (2014)	Kenya	Kenya's economic potentialities and challenges that come with a devolved government	• For a country to ensure successful decentralization, costs that are not critical must be eliminated. These systems governments which may be too many or bureaucratic should be reorganised.	The study did not involve an analysis of data from the Kenyan context.	• As opposed to library-based method, study will be through secondary panel data collection. • As opposed to using data from Brazil, study will collect data from all 47 Kenyan counties.

Nzau (2014)	Kenya	Effects of FD on the growth of the Kenyan economy	• Both decentralized capital finance and decentralized recurrent finance contributes negatively to growth.	Impact of decentralization was narrowly measured using only one indicator - GDP.	• Study will use both descriptive and hypothesis testing. • Study to focus on both decentralized finances plus locally available finances. • Study to include more variables for testing.
Republic of Burundi (2014)	Burundi	Study focused on how to develop a sustainable, predictable intergovernmental fiscal framework and how to promote citizen participation in local governance and social accountability.	• Found very limited role of citizens of the grassroots and absence of detailed expenditure data at local level • Local governments accounted for 3% of revenues and expenditures. • Local governments tend to spend just about what they collect • Devolved local expenditures alone do not accurately reflect the magnitude of public services.	The study is conducted through focus groups and field research but data limitations hamper the scope of analysis.	• Study is descriptive and hypothesis testing to capture aspects of rigor and robustness.
Rugo (2013)	Kenya	The effect/question of direct public participation in the provision of public goods within Local Authorities	• Decentralized funds have scored poorly on public participation and accountability • Participation is minimal and hence influence on local service delivery negligible	The study only focused on one variable, participation and its effect on service delivery	• This study will focus on more than citizen participation by incorporating three other variables: decentralized funds, public governance and performance outcomes
NCCK, IEA (2011)	Kenya	To enable the public access more information about the system of devolution and financial management under the new constitution	• Citizens lack the framework and awareness for participation and enforcement of their rights. • Mechanisms need to be put in place.	The study's main aim is to provide info without relating it with other key variables to establish cause and effect.	• This study will link the knowledge of citizens with performance of service delivery • Study seeks to entrench the influence of citizens more in decision-making of their affairs • Study seeks to highlight governance and accountability.

Kirira (2011)	Kenya	Paper examined the 2010 Constitution and implications for public finance management	• The 2010 Constitution presented an ideal opportunity to overhaul and review many laws that had become irrelevant/inapplicable • Urgent need to build new institutional and administrative structures. • Formalize the legal fiscal framework.	This paper is an incisive narrative of the constitution with examples from other countries and does not relate or examine the reforms with the expected outcomes.	• Study seeks to relate the variables with expected outcomes of fiscal decentralization
Ndii (2010)	Kenya	To highlight key issues of decentralization	• There have been quite a number of attempts to decentralize funds since independence but without success.	Study only extracted the provisions of the Constitution and speculated on the likely implications	• Study will examine relations amongst highlighted variables • Will collect panel data from secondary sources. • Study is descriptive and not just literature review
KHRC, SPAN (2010)	Kenya	Assess the extent of public participation in management of decentralized funds in Kenya with a view to improvement and possible harmonization	• Decentralized funds form a significant portion of government budget though the objective of poverty reduction remains elusive and inequalities high	The study doesn’t establish why decentralized funds fail to achieve the objective of poverty-reduction.	• Study focuses on more variables than just public participation • Study will make comparisons of the impact of decentralized funds in respective regions • Study to assess local governance and capacities.
Ehtisham Ahmad and Brosio (2009)	Cross Country	The paper synthesizes and highlights some critical elements from selected previous studies across the world needed to properly assess the outcomes of decentralization with focus on distributional issues and poverty reduction.	• Despite huge numbers of empirical studies available, general conclusions are still tentative because of the context-specific nature of decentralization designs and time frames. • Evidence from industrialized countries are more positive than that from developing world	Paper analyzes literature of studies that have quite differing motives. The quality of institutions providing data and the analytical treatment of models are quite different in each study analyzed.	• The studies have a common aim of measuring efficiency as the units have similar objectives. • The inputs for the units studied are comparable in both time period and variables assessed.

Menon, Mutero & Macharia (2008)	Kenya	To propose/develop a roadmap for reform that has a broad buy-in of key stakeholders	• The greatest proportion of funds went to recurrent expenditure • Very low levels of investment/ service delivery • Total spending exceeded own revenue • No citizen engagement	Examined performance of 5 major cities only and left all others. Mainly focused on revenue sources Figures were for 1 year and cannot generalize	• Study will cover much broader population and not only 5 cities • Study cuts across rural and urban populations • Study to examine both revenue and expenditure relations • Data to be collected for Five years, not one
Bahl (2008)	Tanzania	To point out and describe the key elements that contribute to the achievement of an effective decentralized fiscal framework.	• The best way to achieving FD is by establishing responsive local governments that are comprehensive, sustainable, transparent with an in-built fiscal discipline.	Study does not examine the relations between the variables. Leaves out a fourth key pillar - subnational borrowing powers	• Study identifies key pillars in fiscal decentralization and conducts regresions to estimate relationships.
Bagaka (2008)	Kenya	FD policies and its implications on the government's operating budget in Kenya	• Fiscal decentralization policies had a positive impact on allocative efficiency as well as equity but exported tax burdens to the national government.	Study narrowly focused on a small element of fiscal decentralization (CDF). The method used is not generalizable.	• Study to use more encompassing data collection tool for completeness. • Study focussed on entire budget. • More variables in the study.
IEA (2006)	Kenya	Discussion paper aimed at highlighting the various devolved funds in Kenya and identifying the key pillars necessary for successful FD	• The need to consider critical issues of fiscal capacity, marginal values of costs and benefits as well as efficiency of intergovernmental operations.	Paper only conducted literature research into other existing studies and did not attempt to examine any relationships.	• Study goes beyond identification of the key variables to analyse how they are correlated.
Balaguer-Coll, Diego & Emily (2006)	Spain	The study assessed links of efficiency and the devolution of competencies among Spanish local governments for the years 1995 and 2000.	• Study results indicate that average efficiency is higher for larger and medium-sized municipalities for both 1995 & 2000. • Both medium and large towns had a higher efficiency values.	Paper analyses relationship on the two variables but fails to accord other key variables like governance and incomes growth. Paper focuses on towns and excludes the rest of the country.	• Study focuses on a multiple of crucial variables which are considered crucial. • Study covers the whole population including municipalities and hence easily generalizable.

Gikonyo (2006)	Kenya	The paper aims at giving a brief overview of the status of decentralized funds in Kenya	• The numerous funds at the grassroots has been created without due consideration of previous initiatives • Many of the various funds were not anchored in law and tended to duplicate one another	The paper based its work on the proceedings and recommendations of a conference and has little literature on either theory or empirics	• The study will conduct extensive research using secondary data to assess relationships amongst identified variables.
Faguet (2004)	Bolivia	The paper sought to answer the question of government responsiveness in Bolivia by assessing how decentralization changed local investment and whether changes related to actual local needs.	• Decentralization has a significant impact on public investment patterns and across the country with clear changes in education, water, agriculture and urban development. • These changes were a direct reflection of local needs.	The study was focused mainly on allocative efficiency concerns and selected sectors of expenditure. This omits other key variables like electoral accountability, impact on overall growth performance, etc.	• Study is more comprehensive as it goes beyond the allocative efficiency variable to include public governance, accountability and electoral responsibility. It also measures the efficiency and growth impacts of each region.
Ndegwa (2002)	Kenya	Stock-taking to understand the extent, pace and consequences of fiscal decentralization	• Decentralization in Africa is spreading but unevenly in both regional spread and aspects. • Pace and content in Africa is moderate and need deepening.	Study does not give a clear relationship between decentralization variables and how they impact growth and development.	• Study will seek to establish very clear relationships between fiscal decentralization and County performance.
UN-HABITAT (2002)	East Africa	Evaluation of a variety of issues that need to be analysed with respect to local democracy as it relates to decentralization	• The result of effective devolution is a function of many actors and systems such as political, fiscal and administrative policies and institutions and how they relate within each country.	No empirical evidence gathered as study was library based.	• The design will go beyond narrative review to include panel data for the whole population. • Both empirical and theoretical evidence will be gathered for the study.
Fisman and Gatti (2002)	Cross Country	Study examined cross-country relationships between decentralization and corruption.	• They find consistency in decentralized expenditure and a negative relationship between lower level corruption across countries. • Also, they find that the origin of a	The study left out many factors that would have effects on the two variables. For example, incomes and efficiency considerations.	• Study incorporates a multiple of variables and sub-variables and uses all revenue sources relevant to local govts study is more in-depth as it focuses on smaller units for comparison within one

			country's legal system is key in the decentralization process.	The study also used federal transfers as measures of fiscal decentralization rather than the vertical shares and the revenues collected at subnational governments.	country.
Zhang and Zou (2001)	Various Countries	Study aimed to collate and extend the findings of previous studies that had considered the growth effect of the allocated public funds among different tiers of government.	• The study found robust negative association between fiscal devolution and regional economic growth and a positive and significant link between central government development spending and economic growth in China. • For India, the authors found that fiscal devolution had a positive and significant relationship with growth.	The study is a descriptive examination of previous studies and does not directly relate fiscal decentralization with economic growth. Rather, the study examines the various components of government spending in the various levels. Study also neglects to assess the possible effects on growth of other factors such as governance and efficiency in allocations.	• Study is on currently recorded data and attempts to establish relationship amongst variables. • Study mainly focuses on the subnational level of govt and takes into account the other key factors such as governance and allocative efficiency.
Crook & Sverrisson (2001)	Various Countries	Study sought to collect evidence across a selection of African, Asian and Latin American countries for comparative analysis on the proposition that decentralization of government will make it more responsive to the needs of ordinary citizens.	• Evidence of cases reviewed gives a distribution of outcomes which enables classification of some decentralization schemes as having performed positively while others performed poorly with respect to responsiveness to the needs of the local poor social and economic development.	The study is a literature review narration of other studies focusing on countries where decentralization had taken place. It focuses only on the relationship between decentralization and social-economic indicators. Of development at the subnational government level.	• Study goes beyond literature review to collect actual data and information. Study focuses on a smaller scope to achieve completeness. • Study integrates other crucial factors that may easily intervene with this relationship.
Luiz and Barenstein (2001)	Cross Country Analysis	To establish the relationship between fiscal decentralization and governance	• Governance can be enhanced through decentralization of expenditure functions. • The higher the share of local	Study relied on data computed by World Bank which normally is summary statistics that do not reflect the	• Data collection will be for entire population. • Both descriptive and hypothesis testing.

			revenue, the stronger the positive association.	aggregates.	• Study to enrich by incorporating more variables. • Secondary panel data will be used covering whole population.
Odd-Helge (2001)	Tanzania	To explore to what extent enhanced autonomy in public expenditure management improved efficiency and performance on the public sector.	• Study found that current officials in several local authorities did not have capacity and the requisite integrity to handle enhanced fiscal autonomy mandate.	The paper is a narrative exposition of the general characteristics of local government tax systems. Paper does not attempt to relate any concepts identified.	• Study focuses on actual features and categories trends and totals of local govt taxes. • Study compares effect of local collections with other revenue sources.
Bradford, Malt & Oates (1969)	Cross Country	The study was to evaluate the hypothesis of unchanging production technology in local public services, a phenomenon which is said to have resulted in cumulative increases in the relative cost of providing those services.	• Study found that, during the period since World War II, current costs per capita have risen at an annual compound rate of roughly 5 – 7% as compared to an annual increase in total local government spending of almost 9%. • Historical records further indicate that subnational governments expect costs to keep rising cumulatively at an increasing rate than those in the rest of the economy.	The study focuses on measurement of costs of select outputs in the sectors of health, education and security. The results may not therefore be attributable to effects on wider performance of local governments and there are no analytical tests to that effect.	• Study focuses on expenditures of wider sectors of public activities and the outputs are by composite indicators tests of relationships and strength of effects are also measured in this study.

Source (Author, 2019)

2.5 Conceptual Framework and Research Hypotheses

The conceptual framework is well established and derives from the seminal works of Tiebout (1956), Stigler (1957), Musgrave (1959) and later reinforced by Oates (1972). The central logic in this study is premised on the contention that if growth and welfare issues are to be taken into account, governments should be concerned about achieving allocative efficiency by supplying public goods and services up to the point where the marginal benefits to society match the marginal cost (Ebel & Yilmaz, 2002). The study aims to establish the extent to which the theory is applicable to the Kenyan context. A discourse of the independent, dependent, moderating and intervening variables has been undertaken as well as a conceptual model and the research hypothesis.

2.5.1 Conceptual Framework

The conceptual framework is clearly reflected in figure 2.1 with the interrelationships of the key identified variables. It is envisaged that fiscal decentralization comprising of the independent variable as indicated by equitable share from the national government, own source revenues from local collections as well as conditional and unconditional transfers grants from the central government will have an effect on the performance of County governments at the local level (Wallis & Oates, 1998). The dependent variable, is represented by wellbeing index which is a composite measure that takes into account other indicates such expenditure per capita, poverty index and county contribution to national poverty incidence (KNBS, 2016).

The authors of the constitutional reforms and the residents residing in various counties expect that the more the equitable resources, the more the revenues collected at County level and that the more the transfer grants, the more improved is the state of wellbeing of residents which is an indicator for performance. This relationship is depicted as route H_{01} which is the link between the independent and dependent variable. Fiscal decentralization is considered crucial for the performance of the devolved institutions without which sub-national governments would not achieve their desired developmental objectives (Dick-Sagoe, 2012). Hence the first hypothesis was stated as follows:

H_1: the effect of fiscal decentralization on performance of county governments in Kenya is not significant.

The direct link between independent and dependent variables is expected to be influenced by a mediating variable which in this study is the allocative efficiency. This variable which is depicted by route H_2 comprises expected benefits, stakeholders engagement and government responsiveness categorized in accordance with Taylor (1993) and Martinez-Vasquez and McNab (1997). The implied expectation is of that residents at the County level are more engaged in making their preferences that the County governments will be more amenable and responsive to the preferred needs and aspirations of the citizens in their public expenditure plans (CoK, 2010).

Local decision-makers should decide what services are to be provided, to which sections of the population and in what quantities, while ensuring that taxpayers pay for them so that people get what they want and have their welfare enhanced (Oates, 1972). Hence the more the engagements and consultations in achieving concurrence on the projects, proposals and programs to be implemented, the higher the efficiencies in allocations in terms of production, distribution and consumption (Smoke, 2001). This is a situation where resources are allocated in a manner that suits citizenry preferences (Kim, 2008). As a result, the County residents are expected to receive value for their allocated budget resources leading to higher levels of wellbeing. Hence the second hypothesis was stated as follows:

H_2: allocative efficiency does not significantly mediate in the relationship between fiscal decentralization and performance of county governments in Kenya.

The effect of the predictor on the criterion variable is also subject to the influence of a moderating variable which in this study is public governance. The variable comprises of human capacity and competency, accountability and effectiveness of government as well as existence of, and compliance of the legal framework as categorized by Kaufmann, Kray and Zoido-lobaton (1999) and Luiz and Barreistein (2001). It is presumed that existence of high caliber personnel in sufficient numbers, backed by accountability structures and effective systems of execution will result in high turnovers and outcomes of government programs/projects, bestowing residents with higher benefits and improved wellbeing. The role of this variable is depicted as route H_3 and was stated as follows:

H_3: public governance does not significantly moderate in the relationship between fiscal decentralization and performance of county governments in Kenya.

While data on poverty levels, wellbeing ranking have been available, no formal statistics existed regarding the Gross County Product and per capita expenditures until 2018, (KNBS, 2019), which made comparisons of the performance of respective County Governments difficult. It is expected that improved performance indicators will result from the joint effect of the independent variable, the moderating variable and the intervening variable which are depicted by route H_4 and was stated as follows:

$H_{4:}$ the joint effect of fiscal decentralization, allocative efficiency and public governance on the performance of county governments in Kenya is not significant.

2.5.2 Research Hypotheses

The study tested the following null hypothesis

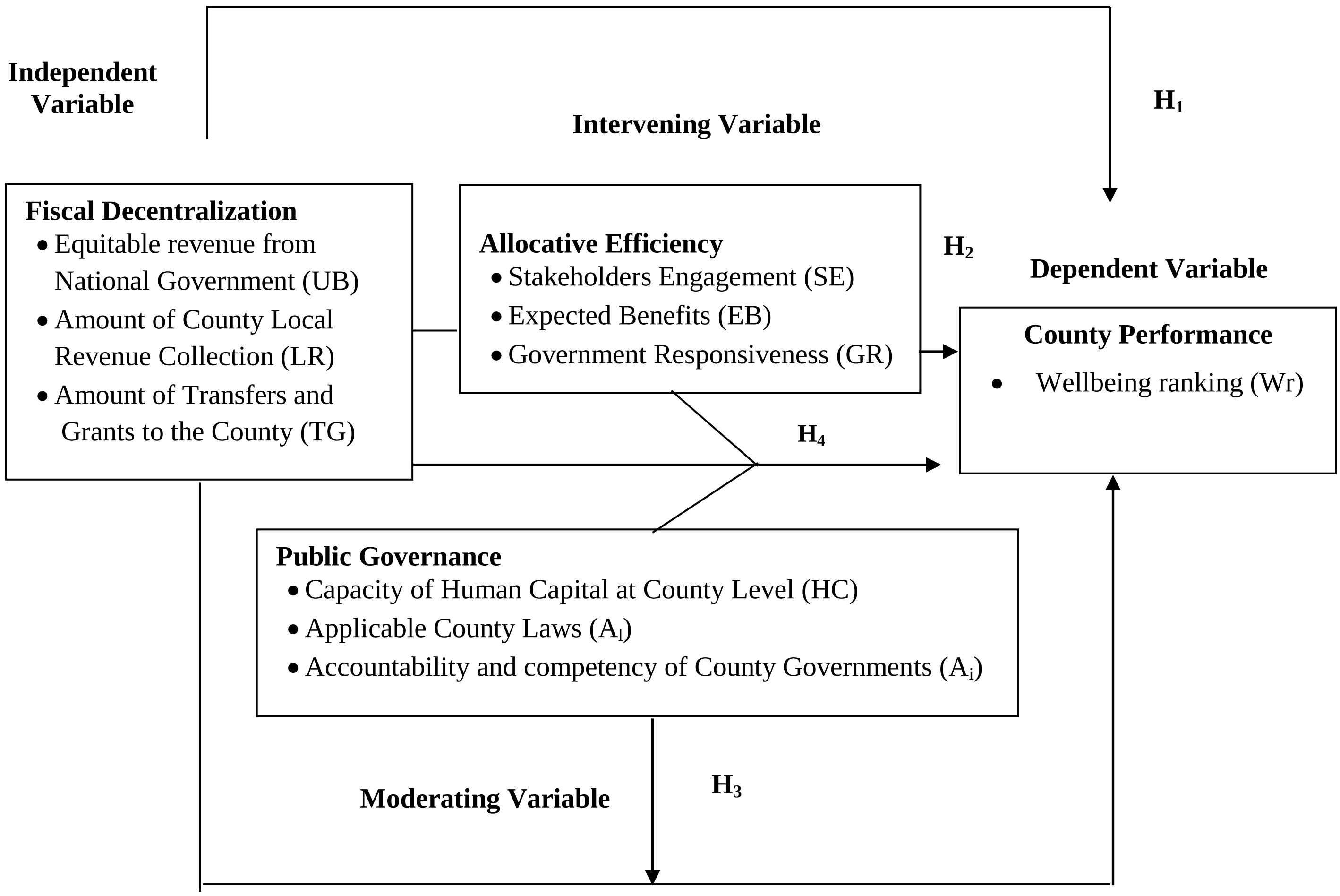
H_1: The effect of fiscal decentralization on performance of county governments in Kenya is not significant

H_2: Allocative efficiency does not significantly mediate in the relationship between fiscal decentralization and performance of county governments in Kenya

H_3: Public governance does not significantly moderate in the relationship between fiscal decentralization and performance of county governments in Kenya

H_4: The joint effect of fiscal decentralization, allocative efficiency and public governance and performance of county governments in Kenya is not significant

Figure 2.1: Conceptual Framework



Source: Author (2018)

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter discusses the methodology and the various steps that were followed in the design and execution of the proposed study. The first step involved discussing the research design, research philosophy, the relevant study population, data gathering and various collection methods, the question of reliability as well as validity of the measurement instruments. The second step involved conducting in-depth literature review to generate and delineate the operational subvariables and indicators of the four main variables comprising the conceptual framework.

The third step of the research involved quantitative analysis of the input data and its interaction and relationships with the various subvariables and indicators generated in the second step above. Examinations of the dynamics and effects as well as operationalizations and explanations of the study variables was then undertaken. The information and methods necessary to undertake step three were generated from extensive review of previous empirical studies and analyzed using various statistical tools and techniques.

3.2 Research Philosophy

A scientific research must be based on some belief about how either experimental or field data of a phenomenon is going to be gathered, processed and analyzed. Sekaran (2006) suggested that scientific research is an organized, systematic and data-based inquiry which produces objectively proven knowledge and seeks to find out the truth through non subjective means of observation, testing and experimentation. Scholars and philosophers have for long based their quest for knowledge by basing their hypothesis and research on two schools of thought namely, phenomenology and logical positivism.

The paradigm adopted by the first school- phenomenology focuses more on cognitive aspects that takes the position that it is possible to probe human minds to provide meaning to observable behaviour. Citing Miller and Salkind (2002) Mwangi (2014) notes that this school of thought attaches more significance to actual experience of constructs or phenomenon rather than how to capture their measurements. This approach thus puts to question the validity of the results obtained as it lacks the rigor of precious definition.

The epistemological approach employed in this study is logical positivism, as the research sought to test several quantitative hypothesis. This paradigm contends that minds are not scientific and must not be the focus of any meaningful scientific study; the way to determine whether a statement or hypothesis is true is to compare what is claimed with the result from empirical evidence (Bob, Robert & Michael, 2002). The study seeks facts and data and then establishes possible causes or relationships of the variables with very little regard to the subjective views or opinions of the researcher. This approach is preferred to others, because the researcher can make propositions that can be verified by empirical tests and analysis by focusing on events and operations that can be observed, measured, analysed and used to influence behaviour.

The approach is superior to others as established causes and interactions can be used or manipulated to desirable effects and predictable ends. Further, the logical positivism approach is rather different from phenomenology as it emphasizes on empiricism and realism which represents the common sense view that when concepts are described, then they take a reality which is independent of the researchers perception of it (Bob, Robert & Michael, 2002). This differs from phenomenology which focuses on immediate experience and tends to be inextricably part of the ordinary events.

Positivism is a very strong form of empiricism which holds the view that scientific propositions are only true if they have gone through the process of verifying, experimenting and testing (Comte, 1798 – 1857). This study was about proposition of various hypothesis based on previous studies and existing theories, secondary data collection that covered a period of five years, analysis and objectives testing. This therefore favoured the adoption of a positivist approach.

3.3 Research Design

The research design is the manner in which the study is structured so that relevant data can be collected and carefully analysed with a view to arriving at a solution. In developing the research design, a great deal depends on the purpose for which the study is being undertaken, the type of investigation to be conducted, the study setting among other factors. While exploratory studies are done when not much is known about a particular issue, descriptive studies are done to describe the attributes of parameters in a given situation (Sekaran, 2006). Other main research designs include experimental design which involves assessment of extent and effect of relationships by manipulating certain variables while holding others constant, and also case study design. Every study has a design or a combination of designs that are best suited for each situation or context.

The type of investigation was correlational as the researcher mainly sought to identify the key variables associated with the subject of fiscal decentralizations and its implications to County governments' performance. Muli (2018) cites Waters (2005) who opined that a descriptive correlational seeks to describe and predict how variables interact and relate in the real world; and the researcher does not attempt to control or ascribe them causal relationships. There was therefore no need to consider any field experiments since the focus was not about cause and effects. This study's purpose was both descriptive and hypothesis testing and sought to offer a comprehensive profile by describing the relevant aspects of the key variables as well as explain the nature of relationships between them.

Both quantitative data and available information were subjected to descriptive methods after being collected in the open natural environment under non-contrived settings as the 47 County governments carried on with their activities without any interference. This design was preferred as it enabled researcher to understand more, the characteristics of County governments, the differences or similarities that exist amongst them as well as keeping track of the changes and effects or links between the variables. Both cross-sectional and time-series data was collected for five (5) years which helped to offer much more comprehensive, deeper insights and also complemented interpretation of results. In this study the panel data collected was subjected to rigorous diagnostic tests to verify and validate suitability before conducting further computations. The tests which are included in the next chapter include those of normality, linearity, multicollinearity, autocorrelation, homoscedasticity, stationarity and unit root.

3.4 Population

The research study focused on the total population comprising of all the fourty seven (47) devolved units of government. The Constitution of Kenya (2010), views the national and County governments as distinct and interdependent and are required to conduct their mutual relations on the basis of consultation and co-operation. The unit of analysis for the study was the County governments (Appendix II) and a census study was undertaken since the total number of units is small and manageable.

To determine the appropriate number of classes into which a distribution of observations should be grouped, Sturges' rule was employed as applied by Scott (2011) and Mirie (2014). The rule is preferred for moderate numbers as it gives similar results to the alternative formula and thus produces reasonable widths of histograms. The rule is K= 1+3.3222(log n) where k is the number of classes and n is the number of observations. A researcher is advised to vary the number of classes having reference to the volume and context of data being summarized. In this study, the number of classes in the frequency distributions was as follows:

$k = 1 + 3.322 (\log_{10} 235) = 1 + 7.876 = 8.8$. The study used a value of K = 9

The class interval for each table was computed by getting the range and dividing it by K (number of classes)

3.5 Data Collection

The research study was conducted by use of secondary panel data for all the 47 County governments covering a period of five years. This implied a coverage of 235 datasets. The instrument used is a comprehensive data collection form (Appendix I). The instrument was developed based on extensive literature review on the subject matter. Both cross-sectional and time series data was gathered and compiled within the period of the study. Vaillant, Lafuente and Bayon (2018) contend that panel data simply refers to a mix of both time series and cross-sectional data. The panel data set allowed the researcher to study cross-section effects across all the counties as well as time-series effects over the time period. Section A covered fiscal decentralization while sections B, C and D covered allocative efficiency, public governance and County governments' performance respectively.

Most of the data was available in financial and economic records collected regularly by National and County Government departments, independent commissions such as, the Commission on Revenue Allocation, Salaries and Remuneration Commission, Office of the Controller of Budget, Office of the Auditor General, Ethics and Anti-Corruption Commission (EACC) as well as Kenya National Bureau of Statistics (KNBS). Other sources included the Public Procurement and Oversight Authority (PPOA), the Commission on Administrative of Justice (CAJ) as well as Parliament. These are the offices and organs of government that are tasked with the mandate of operationalization of the requisite reforms, monitoring, auditing and enforcing reporting and documentation. They helped ensure richness of data, completeness and authenticity. The data captured actual inputs used during each time period for each County and actual recorded outputs per County for each period.

Additional sources included public libraries and research institutions including Institute of Economic Affairs (IEA), Institute of Policy Analysis and Research (IPAR), KIPPRA, Office of the Council of Governors (COG), research by Civil Society Organizations (CSOs) and public universities. Newspapers, magazines, books, journals and websites were also key sources of the data for reviews. All these helped to drive insights into reasons and explanations of the data sets. The relevant data covered the period of five years from 2013 to 2018 and initial datasets for each year were sourced directly from the economic and budget documents of each County. This time period was chosen because it was the transition period; the year the devolved system of governance began to be rolled out in Kenya.

Panel data, which has both a cross-section and time series dimension, are useful for controlling regional-specific effects (Akai & Sakata, 2002). According to Ou, Liu, Wang, Xie and Li (2019), panel data can be effectively used in situations that seek to analyse multi-dimensional observations that are collected from a variety entities over different time periods and hence affords more insights and information to the study. Advocacy for the use of panel data analysis is further anchored on the fact that it can help mitigate the question of an observed heterogeneity in the dataset. The distortion-free data set helps to reveal the two positive effects of fiscal decentralization on County governments' performance. Data on performance was found in KNBS (2016, 2019), the National Treasury (2018), as well as COB (2014-2018).

3.6 Reliability and Validity

The measurement instruments deployed were tested for the strength of their reliability and validity. Reliability of the instrument was tested to ascertain stability and lack of bias in measuring and capturing data. The instrument was employed to collect data for each County every year such that any other tool or technique would turn out the same data. This ensures consistency of judgement of results across time periods, which serves as an indication of the stability of an instrument. Reliability tests serve to ensure the authenticity of the existing relationships as well as their generalizability to the different situations. Both parallel-form reliability and internal stability tests were done using Cronbach's alpha coefficient. This is the measure preferred for multi-scaled items as it gives the extent of correlation on a scale of 'zero' to 'one' (Sekaran, 2006). It is a measure of scale reliability that depicts how well related a set of items are as a group and attests to the goodness of the instrument.

The test for validity is done to check how well the instrument measures the particular concept it is intended to measure. It is expected to detect whether the results accrue from the independent variable changes in the main, not by other confounding factors (Sekaran, 2006). It is a test for the appropriateness of the tool in measuring the various concepts and their relationships, both internally and externally. Tests for both internal and external validity were conducted to ascertain that effects from possible external factors are minimized. Both content and construct validity of research instrument was ascertained by the supervisors to ensure that the data collected were in line with the concepts from the literature. Sufficient items representing the domain of the independent and dependent variables were identified and examined based on the results of previous studies. Both construct, criterion and face validity were validated by the supervisors as concepts suitable for the model.

3.7 Operationalization of Study Variables

The process of operationalization was achieved by developing appropriate definitions of the variables that comprise the conceptual framework. Sekaran (2006) refers to an operational definition as an explicit specification of a variable so as to make it amenable to measurement. The variables in the study were operationalized on the basis of previous empirical studies. Several models were used to demonstrate how the predictor variables were used to examine their effects on the outcomes.

3.7.1 Operationalization of Fiscal Decentralization

Fiscal decentralization which is defined as the study of the various structures and systems that exist and function in a multi-layered fiscal system of governments is divided into three concepts or subvaribales namely; expenditure decentralization, revenue decentralization and local revenue raising efforts. These are the key strategies used across the world to delimit and define the mandates and responsibilities envisaged in the intergovernmental fiscal relations as espoused in table 3.1 below. The choice of relevant inputs and outputs is largely based on previous empirical literature with some variables being specific to the Kenyan context. The inputs used are equitable revenues, local revenue collections and conditional grants from the national governments and other development partners Nieswand and Siefer, (2011). Fiscal decentralization is often measured as the proportion or ratio of subnational governments fiscal share over total government fiscal figures.

The concept is operationalized based on Luiz and Barenstein (2001), Dziobek (2011), Smoke (2001) and Oates (1988). Early contributions can be found in the seminal papers of Tiebout (1956) and Musgrave (1959) who proposed the triumvirate functions of government as allocation, distribution and stabilization. Oates (1972) conceptualized fiscal decentralization as an extension of the basic elements of state structure by which nations of the world design their basic elements of population, territory, government and sovereignty.

Expenditure decentralization is operationalized based on Luiz and Barenstein (2001) subsidiarity principle and the World Development Report (WDR (1999/2000)) that observes a strong movement towards democratic forms of government associated with demands for decentralized governance. Revenue decentralization has been operationalized based on Oates' (1972) decentralization theorem that hold that there are some goods and services that are uniquely suited for specific regions and hence they could be best provided if revenue raising power and expenditure authority were bestowed on subnational governments. In Kenya, local revenue collections and expenditures are effected in accordance with CoK (2010) and GoK's Public Finance Management Act (2012). An effective and appropriately structured intergovernmental fiscal system clearly assigns each level of government its authority to levy various taxes and specifies the mandates and responsibility that each level can exercise in administering the taxes (ECB, 2007).

Table 3.1: Operationalization of Fiscal Decentralization

Variable	Indicators	Definition	Measurement	Source
Fiscal Decentralization on FD=(UB, LR, TG)	Unit budget share	Amount received at County level from the National Govt	Percentages, proportions of unit share of national total	Wallis & Oates (1998)
	Local Revenue	Amount of local revenue collection also called Own Source Revenue	Percentages, proportions of local collections to total unit budget	Tiebout, C (1956)
	Transfer Conditional/Unconditional Grants	Other sums of funds from government and donors to the County level	Percentages, proportions of national government transfers unit budget	Oates (1992)

3.7.2 Operationalization of Allocative Efficiency

Recent empirical research indicate that the design and execution of a multi-layered system of government is likely to significantly influence overall resource mobilization and allocation in a country and hence productive efficiency, growth and welfare. Operationalization of allocative efficiency data and information was based on Taylor (1993) who opined that residents' needs and preferences are identical towards public goods and because consumers are mobile, those with the same level of income achieve the same level of utility. Martinez-Vazquez and McNab (1997) further reinforce this view by holding that improved matching of subnational government (SNG) preferences leads to improved allocative efficiency. It comprises three components as discussed below.

Stakeholders engagement (SE) is assessed in terms of how the citizens participate in expressing their needs and making proposals for consideration for funding. It is operationalized in accordance with the Kenyan Constitution (2010) that calls for cautious engagement of citizens in public expenditure management and policy formulation viewed in terms of citizens and stakeholders participation in planning, budgeting, implementation, monitoring and evaluation of the service delivery chain. The extent of their influence in effecting decisions in the chain determines their impact on the dependent variable (Azfar *et al.* 1999). The concept is further based on Ahmad, Brosio and Tanzi (2008) who prefers fostering of stronger accountability by public institutions to the local populace who are the final beneficiaries. The geographical proximity to the locals bolsters ownership and gives incentives to enhanced tax collection.

Expected benefits (EB) is based on Tiebout (1956) seminal paper that contended that local governments possess better access to informational advantages and local priorities over central governments when it comes to determining the provisions of public goods and services that best satisfies citizens' needs. The justification is that when the provision of public goods is done by the jurisdiction that is in charge of a designated minimum geographical area, the resulting costs and benefits are likely to be fully internalized leading to improved allocative efficiency (Oates, 1972).

Formal public engagement initiatives have been part of the public finance management process since the beginning of the decade with significant influence on some of the select sectors such as education, water and healthcare. It is expected that through engagement of citizens and collection of their preferences and priorities local governments will align their projects and programs for implementation in a manner that accords to community needs. ICPAK (2014) identifies greater accountability and responsiveness of government institutions to the public and creation of political space in the local level as imperatives for good governance. **Table 3.2 below explains:**

Table 3.2: Operationalization of Allocative Efficiency

Variable	Indicators	Definition	Measurement	Source
Allocative Efficiency AE=(SE, EB, GR)	Stakeholders Engagement (SE)	How effective and widespread citizens are consulted	Extent of public participation, citizens collective efforts and lobbying	Martinez-Vasquez & McNab (1997)
	Expected benefits (EB) (preference matching)	Priority setting of project needs by citizens	The extent of public input in decision making on projects and expected benefits	Lori Taylor (1993)
	Government Responsiveness to local demands	How the government responds to the needs of its citizens	Extent of responsiveness by governments to citizens preferences and agendas	Ahmad, Brosio & Tanzi (2008)

3.7.3 Operationalization of Public Governance

Public governance is practiced where the government or public sector is the one managing the affairs and activities of the citizens by using public funds to cater and provide for the various public goods and services. Good public governance is taken as the bedrock of stable and successful nations and promotes the principles of transparency and accountability, the rule of law, media freedom and free and regular elections (Cheema, 2005). The concept is operationalized based on the works of Luiz and Barenstein (2001) and Kaufmann, Kray and Zoido-Lobaton (1999a). It is also viewed as a measure where transparency or access to information is embraced.

Luiz and Barenstein (2001) hold that to improve public governance, emphasis must be placed on judicial reforms, accountability, political stability, enhancing human capital and the quality of bureaucracy. This is a view held by earlier proponents, Kaufmann *et al.* (1999a) who conceptualized the main parameters that are normally used to serve as public governance measures to include the rule of law, voice and accountability, political instability as well as the quality of bureaucracy. This study used the managerial capacity of human capital in utilization of resources made available to them each year which is a measure of absorption rates. The measure is preferred as it assesses the totality of county governments' ability, competency and capacity in utilization of available budgetary resources to produce results. The measurement ratio which lies between 0 – 1 depicts the performance of each county government on this variable.

More recently, Huther and Shah (2004) opined that governance is a complex, multifaceted phenomenon and identified four key composite indices which includes political transparency and citizen voice; efficiency in provision of public goods; promotion of health and wellbeing of all citizens as well as creation of a favorable climate for stable economic growth.

According to ICPAK (2014), most researchers and practitioners identify greater accountability and responsiveness of government institutions to the public, reduction in the rate of official corruption and creation of political space at the local level as imperatives for good public governance. In this study accountability was operationalized as County governments total local revenue collection as a ratio of the set targets at the beginning of each financial year (COB, 2014-2018). The measure was preferred as it underpins the managerial effectiveness of county governments in tax collection vis a vis the responsiveness by the citizens to pay taxes which reflects their satisfaction with government service delivery.

Constitution of Kenya (2010) and IEA, NCCK (2011) further affirm and concur on the crucial indicators of good public governance as encompassing democratic and application of fair practices such as the rule of law, citizens' engagement, the question of equity and equality, transparency and sustainable development. Numerous inquiries points to existence of baseline features of good public governance that underpin the practice. Once the principles expected of good public governance have been identified, there's need to compile necessary measures and processes that can be used as a reflection of the desired outcomes or dimensions. **Table 3.3 below explains:**

sTable 3.3: Operationalization of Public Governance

Variable	**Indicators**	**Definition**	**Measurement**	**Source**
Public Governance G=*f*(HC, A*i*, A_L)	Capacity of Human capital deployed	Effectiveness of County personnel in implementation of government agenda	Absorption rates of both expenditure and recurrent allocated budgets	Luiz & Barenstein (2001)
	Accountability Index of government	Existence of policy and regulatory framework to enable bureaucracy and structures to achieve set targets of local revenue collection	Actual local revenue collected as a ratio of targeted revenue	Kaufmann, Kraay, Zoido-Lobaton (1999)
	Applicable laws enacted locally and others	Total number of new laws enacted	Proportion of enacted laws to the highest number passed	IEA, NCCK (2011)

3.7.4 Operationalization of County Governments Performance

The performance of County Governments was operationalized to reflect the impact and outputs resulting from the performance of the transformation process. The outputs were based on the KNBS (2016) and World Bank (2014) indicators of performance which include Poverty indices, wellbeing ranking, literacy and life expectancy levels, employment rates as well as a County's contribution to the overall national poverty incidence. Human wellbeing is considered as the unified concept that is characterized in an individual family and larger community as being healthy, happy and prosperous (Pollnac *et al.*, 2006) and it is generally expected that County governments, whose main objective is to promote the welfare and the interest of their citizens must constantly assess how well they are performing or keeping watch of the changing preferences of the electorates.

The effectiveness and capacity of the production process was operationalized based on the Budget Implementation Review Reports from the Controller of Budget (2013-2018) which measures the absorption rate of allocated resources for each County government given that every county has limited resources and needs skilful planning and targeted interventions in order to make meaningful changes and impact on the wellbeing of their citizens. The indicators are identified as crucial in determining where the performance of County governments has improved or not in line with objectives of fiscal devolution. They reflect the ability of a County to recognize and transform new information, knowledge and resources to enhance their performance.

Table 3.4 below explains:

Table 3.4: Operationalization of County Governments Performance

Variable	**Indicators**	**Definition**	**Measurement**	**Source**
Performance of County Governments (Wi)	Wellbeing index	Levels of living standards, health, literacy, employment, consumption per capita, happiness and general prosperity	Expenditure per capita, percentage of poor people, percentage of people below poverty line, inequality gap	GoK, (KNBS 2016)

3.8 Data Analysis

The panel data collected was analysed based on the four steps model devised by Sekaran (2006). The specific steps include preparation of data for analysis, getting a feel of it, testing the goodness of fit for the data and hypothesis testing. This was done to ensure the data was of reasonably good quality and amenable to further analysis and statistical computations. The nature of data provided multiple observations on each County as well as information on individual patterns of change. The Durbin-Hausman test was used to help evaluate the consistency of regression models used. Various descriptive statistical measures including the mean, the range, standard deviation, skewness and kurtosis were also computed in order to get a better understanding of the nature/features of the data collected. In addition, diagnostic tests were conducted. These were tests for normality, linearity, multicollinearity, autocorrelation, heteroscedasticity and unit root.

Correlation coefficients were computed that indicates the strength and direction of the relationship of variables by applying a formula that relates the two sets of figures. To test significance of the correlation between any of the variables, the study used the t-test which measures the difference between observed statistics and the estimated values. The corresponding p- value for each t- statistic was used to test the significance of the regression coefficients at the 5% level. A Pearson correlation matrix was used to provide this information. Multiple regression analysis was also used to test the strength of the various independent variables correlated to the dependent variable in an effort to explain the extent of variations therein.

The research also used hypothesis testing and hierarchical multiple regression in order to logically explain and establish, by providing evidence, the nature of relationships, the independence or effects of one, two or more variables in order to understand and get valid results. The type of investigation used was a mix of both regression and correlation studies under non-contrived settings. Wallis and Oates (1998) used a similar approach in exploring the outreach and variation of fiscal devolution in the national and sub-national sector in the US; while Taylor (1993) used similar tests for allocative efficiency based on Brueckner’s (1979) approach, which yielded mixed results.

3.8.1 Preliminary Data Analysis

There exists a broad category of measurement approaches called basic needs accounts or capability accounts of wellbeing, but one of the most well-known approach is the UNs' Human Development Index (HDI) which identifies the concept of wellbeing as resting upon three factors: income levels and distribution, education levels and health standards. With panel data from all the 47 counties, the researcher used a common class of poverty measures formula as advanced by Ravallion (1998), Sen *et al.* (2000) to compute the index of each County. The poverty line is a threshold applied for separating the poor and the non-poor and in this study it was derived based on the cost of basic needs (CBN) approach for basic basket of goods and services consumed by households using the method adopted by Ravallion (1998). Those above the poverty line are deemed to enjoy high state of wellbeing as a group or region at a given place and time. The poverty measure, Pi is defined as:

$$Pi = {}^{1}/_{N} \sum_{i=1}^{N} I(Yi < z) \quad \ldots\ldots 3.1$$

Where:

N is the population size,

Y_i is the level of individual wellbeing or actual per capita consumption/expenditure of the i^{th} individual,

z is the poverty line,

I is an indicator function that maps the value of one, and zero otherwise.

Wellbeing ratio is defined as:

$Wr = (1 - Pi)$

which should be understood in terms of citizens real opportunities that give all possible combinations of functioning from which they can make choices (Sen *et al*. 2009). The poverty headcount index refers to the number of individuals whose consumption expenditure is below the poverty line as a percentage of total population in the County. It reflects the share of the population who are unable to purchase the minimum basic basket of food and non-food items (KNBS 2016). This income and expenditure measure is the most commonly used metric in practice for comparison of wellbeing and living standards of individuals and regions.

The characterization of welfare postulates a utility function defined over consumption of commodities such that the function produces consumer preferences over alternative consumption bundles (Ravallion, 1998). Hence the poverty line can be interpreted as the point when the consumers expenditure give the minimum cost to the household or region of attaining a given level of utility at the prevailing market prices. Balassa-Samuelson model (1964) holds that there is a positive association between expenditures and development and performance as measured by HDI. A respective poverty line tends to rise as the average expenditure rises which is proportional to the mean and median income of the population.

According to Sen *et al*., (2009) some key dimensions of wellbeing targeted by policy makers include: material living standards and consumption; health morbidity and educational literacy levels; time spent on productive and leisure activities; political voice and accountability; social networks and sense of both economic and physical security. These basic needs are considered to be a socially determined normative minimum provision necessary to avoid poverty. This is a method particularly suited for measuring the performance of non-profit service sectors like County Governments where the output and impact is not measured in monetary terms, but the performance and effectiveness is based on the impact and scope of the public goods provided (Lovre & Jotic, 2016). According Oswald (1980) economic success is only a means to an end as living happy, healthy and fulfilling lives is what people desires most.

OECD (2013) notes that the analysis of performance is crucial as the repeated failure of governments to meet medium-term spending objectives. This also reinforces the need to improve the capacity of decision makers to control public spending. County Governments (CGs) were considered as the Decision Making Units (DMUs) that contribute/apply expenditures (inputs) in order to provide a certain bundle of publicly provided goods and services (outputs), without assuming a functional form of the transformation process.

The total expenditures (equitable revenue, local revenue and conditional grants) was used as a single input employed by CGs to provide goods and services assigned to them. Using total expenditures as input measure allows the incorporation of all relevant input information on the one hand while also implicitly assuming that input factor prices are the same for all DMUs. This assumption is reasonable given that CGs have access to the same capital and labor markets which are regulated by procurement laws (PPOA, 2015) and Salaries and Remuneration Commission (SRC) regulations (2012) respectively. Although the outputs do not comprise all the functions and services provided, the selected indicators of wellbeing cover the outcomes of composite functions and activities whose impacts can be verified/measured.

While this method of wellbeing measurement is employed in the current study, it is worth noting that OECD (2006) considers a nation's wellbeing as depending more on factors that are not necessarily incorporated in GDP calculations such factors include the state of being satisfied with life, enjoying good quality of life and a high state of wellbeing (Diener, 2003).

3.8.2 Diagnostic Tests on County Governments Panel Data

In this study data was and analyzed using regression analysis, correlational analysis as well as testing of the hypothesis. However, before proceeding with the regression analysis, several conditions needed to be met. Hence the data collected was subjected to rigorous diagnostic tests to verify and validate suitability before conducting further computations. These tests included normality, linearity, multicollinearity on the independent variables; autocorrelation, homoscedasticity of the residuals, as well as unit root test for stationarity of the time series data. When the above tests are conducted and conditions verified, the models derived from the analysis can be said to accurately represent the population or units studied.

3.8.3 Tests for Normality

Tests for normality was conducted in order to establish whether data was normally distributed. The normality assumption relates to the distribution of residuals which is assumed to be normally distributed such that the regression line fitted to the data has the mean of residuals equal to zero. Empirical studies have shown that statistical errors are common and hence the various assumptions of normality needs to be checked because the validity of various statistical procedures such as parametric tests are based on it (Ghasemi & Zahedias, 2012). A study conducted by Chantarangsi, Liu, Bretz, Kiatsupaibul and Hayter (2018) emphasized the importance of conducting normality tests especially by use of Shapiro-Wilks test in order to establish whether data is normally distributed.

The regression analysis test which was used employs the correlation of values arranged in ascending order with those of the normal distribution. It’s one of the most powerful normality tests available and is able to discern small deviations from normality (Ghasemi & Zahedias, 2012).

3.8.4 Tests for Linearity

Tests for linearity are among the most important tests that need to be carried out especially when using multiple linear regression models. It is important to test linearity because many statistical and econometric techniques require the assumption of linearity of data which signifies that the samples were derived from a population that relates with the variables of interest proportionately (Damon, 2017). This assumption of proportionality of related variables is important in efforts to maximize or minimize results. A study conducted by Jalkanen, Hautero, Maksimow, Jalkanen and Hakovirta (2018) revealed the essence of conducting linearity tests especially to establish whether there is a linear relationship between any given set of variables. It is a requirement in the correlation and linear regression analysis to be able to provide results that are reliable and acceptable.

3.8.5 Multicollinearity Tests

As highlighted by Piana, Cardoso, Dias, Gomes, Agostinho and Miranda (2017), multicollinearity tests are crucial especially in order to check whether the predictors in a regression model are themselves correlated. Accordingly, the test was conducted on the three variables under fiscal decentralization namely equitable allocation from the national government, local revenue collections by the County government as well as conditional and unconditional grants given to the counties. This was done by use of variance inflation factors (VIF) which according to DeForest, Brix, Tear and Adams (2018) is a measure of the extent to which the residuals in a multivariate linear regression is inflated by its correlation with other concepts in the model. It’s a phenomenon where a predictor variable in a multiple regression model can also be linearly predicted and inferred from the others.

3.8.6 Autocorrelation Tests

In order to check for autocorrelation, the study employed the Durbin Watson test statistic which is used to test for first order serial correlation. This is a measure of correlation between the errors of a series and others from the same series and can be positive or negative (DeForest *et al.*, 2018). The study hypothesized a null hypothesis that there does not exist a first order autocorrelation from the regression analysis. The test proceeded to examine if serial residuals are autocorrelated at a *P*-value of 0.05.

3.8.7 Unit Root Tests

A unit root is a feature of random probability distribution process involving time series models that can occasion challenges in statistical inference. It is a trend in a time series that displays a systematic pattern that is unpredictable. Existence of a unit root can cause serious issues in statistical analysis like spurious regression or errant behavior of results (Long, Sun, Cheng & Zhang, 2017). A unit root is one of the causes of non-stationarity. In this study, a test for existence of unit root was conducted by use of Augmented Dickey Fuller (ADF) technique which tests the null hypothesis that a unit root exists in a time series data set.

3.8.8 Heteroscedasticity Tests

This is yet another critical test in most of econometric and statistical analysis. Adamec (2017) highlights that the test is used to check for the presence of various patterns of non-constant variances in the linear model. The presence of heteroscedasticity in the application of regression analysis is of great of concern as it can invalidate or bias the significance of statistical tests. The research used Breusch-Pagan / Cook-Weisberg test. For the model to hold the variance of residuals should be constant otherwise they would be referred to as being heteroscedastic.

3.9 Relationship between Fiscal Decentralization and Performance of County Governments

The very first study objective was to determine the relationship between fiscal decentralization and County governments' performance. A multiple regression model was used to establish the strength of the two variables while correlation analysis was used to establish the direction of their relationship. This model was used to test hypothesis one (H_1).

The predictor-criterion variables were modelled as shown below and appropriate statistical measures computed by use of STATA 14 programming software. The models are:

$Wi = \beta_o + \beta_1 UB + \beta_2 LR + \beta_3 TG + \varepsilon_i$……………………………………………..……3.2

Where;

Wi is the wellbeing index for the period,

UB is the equitable revenue from National Government,

LR is the local revenue collection,

TG is conditional/ unconditional grants from National government and others.

β_o is the regression constant or point of intercept, and

$\beta_1 \ldots \beta_3$ are the regression coefficients and ε is the random error.

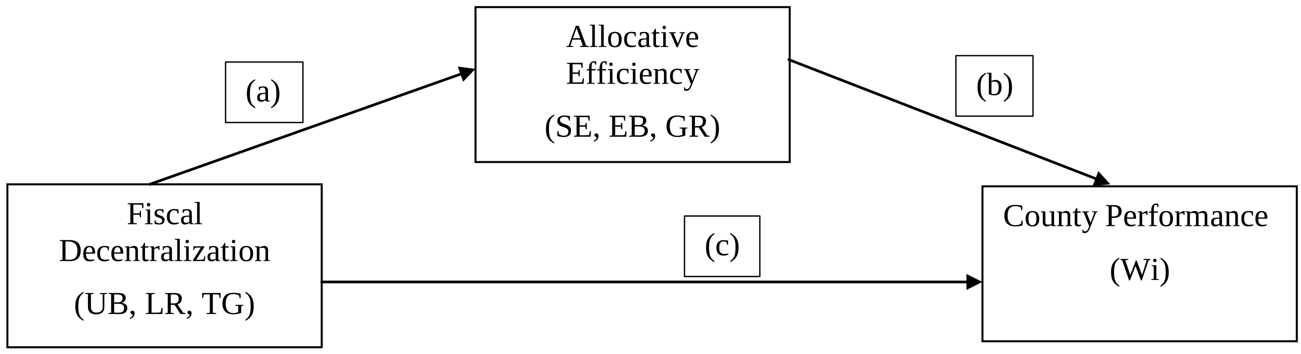
3.10 Mediating Effect of Allocative Efficiency on the Relationship between Fiscal Decentralization and County Performance

The second objective of the research was to determine the mediating effect of allocative efficiency on the relationship between fiscal decentralization and County governments' performance. A mediator is a causal variable that always functions as independent to the dependent variable. There have been limited empirical attempts to study and quantify the extent and spread of allocative efficiency (Green, 1997). As allocative efficiency has traditionally three divisions that are: efficiency in consumption, production and in distribution (Liebenstein, 1966). Allocative efficiency accommodates differences in tastes for public goods and services hence justifying the principle of subsidiarity from an economic-efficiency perspective (Tiebout, 1956, Oates, 1972). Greater allocative and producer efficiencies are realized through decentralized expenditures (Martinez, McNab, 2003) as local governments can better discern local preferences and needs, and can produce goods at lower costs leading to high standards of living (Limi, 2005).

The allocative efficiency is also a measure of public engagement in determining how public needs and preferences are responded to by the government and assessing accountability of resource usage (Wallis & Oates, 1988). Community-wide demands and priorities are articulated through a collective decision-making for the available budget due to the absence of market forces and competitive pricing premises for public-provided goods and services. (Azfar et-al, 2001).

The logic of allocative efficiency through stakeholders engagement, preference matching and government responsiveness suggests that in a system where there are opportunities for mobility, individuals choose to go to a locality that offers a tax regime of their preferences, which leads to consumer efficiency. The ensuing competition amongst different localities brings down cost, hence attaining producer efficiency (Musgrave, 1959; Tiebout, 1956)

In this case, good allocative efficiency is expected to positively affect the performance of fiscal decentralization resulting in enhanced performance of County governments. The mediator was depicted and measured by use of path analysis in the following three steps:



Source: Author (2018) adopted from Baron and Kenny (1986)

1. Regressing Allocative Efficiency (SE, EB, GR) on the predictor, fiscal decentralization to test the relationship that exists in path (a) alone.

   $AE = \beta_o + \beta_1 FD + \varepsilon_i$……………………..……………...……………….3.5

2. Regressing County Governments performance on Fiscal decentralization to test for Path (c).

   $CP = \beta_o + \beta_1 FD + \varepsilon_i$………………………………………………………3.6

3. Regressing County Governments performance (CP) on both the dependent variable and the intervening variable to test for paths (a) and (b).

   $CP = \beta_o + \beta_1 FD + \beta_2 AE + \varepsilon_i$……………………………….………..….3.7

The various paths in above diagram depicted as (a), (b) and (c) are denoted as follows:

c represents the impact of the predictor variable (FD) on the dependent variable (CP),

b depicts the impact of the mediating variable (AE) on the dependent variable and

a depicts the impact of the predictor variable (FD) on the mediating variable (AE).

CP is performance of County governments Wi (where, $0 < Wi < 1$)

ε is the random error term.

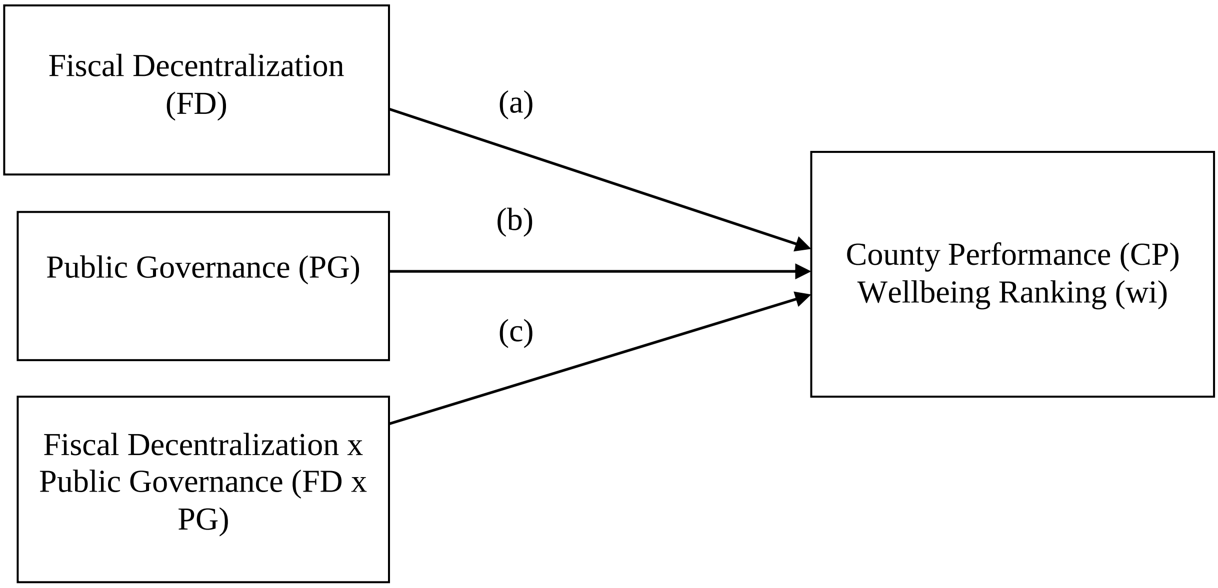
Mediation is said to occur if variations in the independent variable (FD) significantly account for variations in the mediator (AE) and if variations in the mediator significantly account for variations in the dependent variable (CP). In addition, even when the mediator is ignored the independent variable must continue to have a significant effect on variations on the dependent variable. If any of the three steps fails to significantly predict the dependent variable then mediation is said to fail and the analysis of the process stopped. To evaluate mediation, the separate coefficients for each equation were estimated and tested using P-values. These regressional equations provide the tests of the linkages of a mediational hypothesis. The model was also used to test the second hypothesis (H_2).

3.11 Moderating Effect of Public Governance on the Relationship between Fiscal Decentralization and County Performance

The third objective of the study was to establish the moderating effect of public governance on the relationship between fiscal decentralization and County governments' performance in Kenya. The model was used to test hypothesis three (H_3). A moderator is a variable that functions to account how and why a given relationship between a predictor variable and a criterion variable exists. The moderator, in this case public governance was measured by use of both correlation analysis as well as interaction effects in the ordinary least squares and multiple linear regression. If fiscal decentralization is denoted as X and moderator (PG) as Z, and County performance as Wi, then Wi was regressed on X, Z and then on XZ. The moderator effects were indicated by the significant effects of XZ while holding X and Z constant.

$$Wi = \beta_o + \beta_1 X + \beta_2 Z + \beta_3 XZ + \varepsilon \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots 3.3$$

The purpose was to determine the moderating effect in the relationship between fiscal decentralization and County performance. A common path analysis framework together with the model below was deployed reflecting both a descriptive and an analytic procedure.



$$CP = \beta_o + \beta_1 (FD) + \beta_2 (PG) + \beta_3 (FD \text{ x } PG) + \varepsilon \quad \ldots\ldots\ldots\ldots\ldots\ldots 3.4$$

The model was used to measure the third hypothesis (H_3)

Where, $\beta_1 \ldots\ldots \beta_3$ are the regression coefficients, CP is the performance score,

FD is the Fiscal Decentralization composite score,

PG is the composite result of capacity of human capital and accountability (measured in terms of compliance absorption rates, degree of local revenue collections and enforcement of legal requirements) as defined in section 3.7.3.

βo is the intercept term while,

ε is the error term that is taken to account for the unexplained variations.

The composite scores of both fiscal decentralization and public governance were arrived at by computing the arithmetic mean of the respective indicators of each variable. The value for public governance was found by getting the mean of the ratios of absorption rates, accountability indexes and the ratio of number of laws enacted in each County given the highest possible number achieved by a County (Appendix VII).

3.12 Joint Effect of Fiscal Decentralization, Public Governance, Allocative Efficiency and County Performance

The forth objective of the study was to establish the joint effect of fiscal decentralization, allocative efficiency and public governance on the performance of County governments in Kenya. A stepwise multiple regression model was used to test the effects as well as hypothesis four (H_4). The model specification is as follows:

$$CP = \beta_o+\beta_1UB+\beta_2LR+\beta_3TR+\beta_4HC+\beta_5Ai+\beta_6A_L+\beta_7SE+\beta_8EB + \beta_9GR + \varepsilon_i \text{……..…..} 3.9$$

Where UB, LR, TG are as defined in equation…………………………….……..…3.2

SE, EB, GR are as defined in section 3.7.2

HC, Ai, A_L are as defined in section 3.7.3

ε_i is the intercept and β_1…… β_9 are the various coefficients of determinants.

The joint effect of County governments' performance is reflected by the average wellbeing ratio. The study deployed the approach of timed-averaged data in accordance with Davoodi and Zou (1997) since the benefits of fiscal decentralization are not likely to influence year–in year-out fluctuations but rather have an impact on long run performance regression estimated on data averaged over the five (5) year period of study. Accordingly, the dependent variable, performance is indicated by average wellbeing ratio computed over the period when formal data was available.

CHAPTER FOUR

DESCRIPTIVE DATA ANALYSIS AND PRESENTATION

4.1 Introduction

This chapter delves into the analysis of the coverage of data collected and also presents descriptive statistics of the study variables. These include equitable share allocation, local revenue collections, conditional grants, stakeholders engagement, expected benefits, government responsiveness, capacity of human capital, accountability, applicable laws, welfare measures, poverty levels and human development indices. The statistics comprised of minimum, maximum, mean, standard deviation, kurtosis as well as skewness. Minimum and maximum values demonstrate the least and highest values obtained in the data for respective variables. The arithmetic mean and standard deviation are used to show the average value of a given variable and the variations in the values obtained respectively.

Skewness was used in order to establish the symmetry of the distribution on the one hand, while kurtosis was used to establish the peakedness and flatness of the distribution curve of the values. The study being a panel data analysis, diagnostic tests were conducted which included normality, linearity, multicolinearity, autocorrelation, homescedacity as well as unit root test. The results are captured by use of figures, histograms, bar charts, frequency tables and graphs.

4.2 Reliability and Validity Results

Both reliability and validity tests were conducted in order to determine the internal stability and consistency of the research instruments used in the study. To ensure the goodness and effectiveness of the instrument in tapping into the correct data and information, an initial data collection form was devised based on indicators identified through previous studies as well as constitutional and legal statutes. The tool was further discussed with the supervisors and their inputs incorporated to ensure it captures the totality of the various concepts of the study into a single theoretical framework.

Aware of the significance of the validity of a measurement tool, both construct and criterion validity were pursued and achieved by employing a comprehensive but precise data collection form clearly identifying key variables and their indicators for all the counties. A census of the 47 County governments was undertaken in order to enhance both external validity and generalizability. All data was collected by the researcher from official secondary sources that are documented in order to enhance both credibility and reliability of study findings.

Face validity was ascertained by the supervisors as giving basic and minimum indicators required for the measurement of the various concepts. Criterion-validity was assessed and achieved by relating the indicators of the independent variable with changes in the dependent variables. The primary concern is the sign and significance of the coefficient on the independent variable as regressed on the dependent variable. The expectation is that of a positive and significant relationship given that theoretical and conventional propositions are in favour of fiscal decentralization (Davoodi & Zou, 1997).

Reliability tests were run on the measurement instrument to determine internal stability and consistency by use of Cronbach's alpha coefficient. Sekaran (2006) notes that if the data captured is highly correlated on a scale of 0 – 1, the better and the researcher can be fairly certain that the instrument is quite reliable.

4.3 The Study Data Coverage

Data was available for all the 47 County governments for the five year study period. A census was undertaken for the entire population amounting to 235 data points. Data for the independent variable side of the model was readily available just as the dependent variable indicators that reflect the several outcome measures in the model. The institutions that collect and analyze the primary data namely National Treasury, Office of Controller of Budget, Commission of Revenue Allocation, Kenya National Bureau of Statistics and others played a crucial role in providing actual official data that can be said to be accurate and reliable.

The study achieved a 100% success rate of data capture compared to previous studies such as IEA/NCCK (2011) study that sought to shed light on the practices and principles of decentralization and reported an overall response rate of 89%. The high rate of response of data capture in the range of more than 95% is attributed to the fact that all the data and information sought is in the public domain as County Governments (CGs) are obligated to publish and publicize it on a regular basis (CoK, 2010; PFMA, 2012). Hence formal repositories like public libraries, research institutions, think tanks and websites have the data already coded and stored.

4.4 Fiscal Decentralization

This section discusses the various perspective of fiscal decentralization (FD) as earlier indicated in chapter three. The concept has been operationalized to include equitable revenue, local revenue and conditional grants. The need for County governments to have reliable revenues is anchored in Kenya’s Constitution (2010) which defines their funding sources to include equitable share of at least 15 % of the most recently audited revenues raised nationally; conditional and unconditional grants from national government; local revenue collections; equalization funds for certain designated areas, as well as borrowings (National Treasury, 2017)

4.4.1 Equitable Shareable Revenue

The sharing of equitable revenue by Commission on Revenue Allocation (CRA) was guided by Article 203 of Constitution of Kenya (2010) which considers the capability and competency of County governments to execute mandates allocated to them. It complies with the constitutional principle of ‘resources following functions' under Article 182 of CoK (2010) which states that if a function or power is transferred from a government at one level to a government at another level, arrangements shall be put in place to ensure that the resources necessary for the performance of the function or exercise of the power are transferred.

The criterion for revenue sharing seeks to ensure equity while at the same time assuring that all County governments have the fiscal capacity for the provision of a comparable level of public goods and services (CRA, 2014). The transfer system is driven by the vertical balance objective which uses historical expenditure levels to assess the needs of respective County government and the relevant amount of transfers due to each County. There is however a challenge of knowing and identifying the real parameters that would guide how best to measure the vertical as well as the horizontal fiscal balance objectively because expenditure needs are almost limitless. According to CRA (2019), there is no internationally agreed set of parameters to be applied in disbursement of funds and this is guided by the specific purposes or functions to be performed by SNGs in each country as provided in their statutes/constitutions. There also does not exist an agreed methodology for determining the weights assigned to the various factors in the revenue transfer formula and various countries use different approaches in determination of the weights which can later on be reviewed as changes in policy, priorities and objectives demand. The criterion used in Kenya for the period under study is summarized in the table and formula below:

Table 4.1: Summary of Parameters and Weights

Parameter	Population	Equal Share	Poverty Index	Land Area	Fiscal Prudence	Devt. Factor	Fiscal effort	Total
Weights (%)	45	26	18	8	1	1	2	100

Source: Commission on Revenue Allocation, County Allocation of Revenue Acts, 2013 and 2014

$$\mathbf{CA_i = 0.45\ PN_i + 0.26\ ES_i + 0.18\ PI_i + 0.08\ LA_i + 0.01\ FR_i + 0.02\ FE_i + 0.01\ DF_i}$$

Where: i is County i, 1, 2…………47

CA_i is revenue allocation of the i-th County, PN_i is population factor, ES_i is equal share factor, PI_i is poverty index, LA_i is land area factor, FR_i is fiscal responsibility and FE_i is fiscal effort, while DF_i is development factor.

While total disbursement to the counties have increased gradually over the study period, the increase in receipts for the counties have differed significantly as determined and guided by the parameters included in the revenue sharing formula. The primary objective remains that of enhancing equitable service delivery; promotion of balanced development; optimization of local revenue potential and prudent utilization of available resources (CRA, 2018). The first focus of descriptive analysis was on equitable share allocation of funds from the national government. Table 4.2 below illustrates the total frequency distribution of devolved funds allocations among the 47 counties within the 5-year period of study.

Table 4.2: Equitable Share Distribution (Ksh Bn)

Class Interval (Ksh Bn)	Frequency	Percentage
2.000-3.000	5	2.13%
3.001-4.000	47	20%
4.001-5.000	59	25.11%
5.001-6.000	53	22.55%
6.001-7.000	22	9.36%
7.001-8.000	18	7.66%
8.001-9.0000	24	10.21%
10.001-11.000	2	0.85%
12.001-13.000	2	0.85%
14.001-15.000	3	1.28%
Total	**235**	100%
Arithmetic Mean	5.527	
Standard Deviation	2.073	
Highest	14.045	
Lowest	2.052	
Skewness	1.439	
Kurtosis	3.399	

Source: Author (2018)

The distribution was found to be asymmetrical and positively skewed to the right with a value of 1.439. Hence the mean, median and the mode were found not to be identical. The analysis was further confirmed by use of the Shapiro – Wilks test.

As summarized in table 4.2 above, the least amount was Ksh. 2.052Bn and the maximum amount was Ksh. 14.045Bn. The value of arithmetic mean for equitable share of distribution of funds from the national government was Ksh 5.527Bn.

It was also noted that the value of standard deviation for equitable share from the national government was Ksh. 2.072Bn. The value of skewness for equitable distribution of funds from the national government was 1.439, which when compared with the other two variables under fiscal decentralization, was the least. This shows that it is relatively more skewed to the right in comparison to conditional grants and local revenue. Kurtosis, which measures the degree of spread of data relative to a normal distribution was found to be 3.399 depicting a highly peaked distribution known as leptokurtic. This was assessed by use of Jacque-Bera test which matches data on skewness as well as kurtosis to determine whether it approximates a normal distribution. It is a goodness of fit test. The skewness value of a normal distribution is zero, implying perfect symmetry around the mean and a kurtosis of three (3), which tells how much data is in the tails and gives an idea of how ‘variable’ the distribution is. A kurtosis value of -1 to +1 is considered very good but -2 to +2 is also usually acceptable (Cohen, 1992).

4.4.2 Local Revenue Collection

Local revenue, also referred to as Own Source Revenue (OSR) is provided in the CoK (2010) that gives authority to county governments to levy selected types of taxes like property rates, entertainment fees, charges for services they provide and any other tax or fees authorized by legislation. The biggest revenue streams employed by the County governments are property-related incomes, administrative fees and charges and business licenses. At the start of the devolved system of governance in FY 2013/2014, County governments inherited all revenue streams previously administered by the defunct local authorities. They also inherited their structures, procedures, revenue collection personnel, all of which had many shortcomings and inefficiencies. **Table 4.3 below shows:**

Table 4.3: Local Revenue Frequency Distribution (Ksh Bn)

Class Interval (Ksh Bn)	Frequency	Percentage
0.000-1.29800	210	89.36%
1.299-2.59600	17	7.23%
2.597-3.89400	3	1.28%
10.385-11.682	2	0.85%
9.087-10.3840	2	0.85%
11.683-12.980	1	0.43%
Total	**235**	**100%**
Arithmetic Mean	0.681765	
Standard Deviation	0.161229	
Highest	11.71	
Lowest	0.027417	
Skewness	5.553	
Kurtosis	32.799	

Source: Author (2018)

The table above summarizes the descriptive statistics of the local revenue collections for the 47 counties for five years (Appendix V). From the findings of the study it emerges that the minimum value was Ksh 0.027Bn which was attributed to Tana River County while the maximum value was Ksh. 11.71Bn attributed to Nairobi County. As summarized in the table, the value of arithmetic mean for local revenue collections was Ksh 0.682Bn while the Standard deviation for the 47 County governments was Ksh. 0.161Bn.

The value of skewness for local revenue collection for all the 235 data points was 5.553, which was the highest of all the indicators under fiscal decentralization, showing that the distribution of local revenue collection was strongly skewed to the right and is at the same time higher than that of conditional grants and equitable share from the national government. The value of Kurtosis for local revenue collections was 32.799 hence showing that the distribution was highly leptokurtic. Since this value was the highest, it can be said that under fiscal decentralization, the peak of the distribution for local revenue was higher than that of conditional grants and that for equitable disbursement from the national government, implying concentrated distribution except the case of Nairobi which can be regarded as an outlier.

4.4.3 Conditional/Unconditional Grants

The counties receive grants from various sources for supporting various projects and programs. The sources include the National government, development partners, local and international NGOs as well as the private sector. Conditional grants are funds that are specifically targeted to identified projects and programs such as electricity, water dams, referral hospitals, agriculture and higher and tertiary education. These grants are necessary as vertical imbalances that occur when the expenditure responsibilities of CGs do not match with their ability to raise revenues (CoK, 2010). (Appendix VI)

Table 4.4: Frequency Distribution of Conditional Grants (Ksh Bn)

Class interval (Ksh Bn)	**Frequency**	**Percentage**
0.000-5.55900	115	48.94%
5.560-11.1180	s70	29.79%
11.119-16.677	15	6.38%
16.678-22.236	17	7.23%
22.237-27.795	6	2.55%
27.796-33.354	7	2.98%
33.355-38.913	3	1.28%
38.914-44.472	1	0.43%
50.032-55.590	1	0.43%
Total	**235**	100%
Arithmetic Mean	8.789911	
Standard Deviation	7.857571	
Highest	51.63	
Lowest	1.598	
Skewness	2.262	
Kurtosis	5.733	

Source: Author (2018)

Table 4.4 above provides descriptive statistics for conditional and unconditional grants given to the various County governments. It is clear that the minimum value was Ksh 1.598Bn which was associated with Lamu County. On the other hand the maximum value of the conditional grants was Ksh 51.63Bn that was associated with Nairobi County. The value of arithmetic mean for conditional grants was Ksh 8.7899Bn and the standard deviation was Ksh 7.858Bn.

The value of skewness for conditional and unconditional grants given to County governments was 2.262, showing that the distribution for this variable was right-skewed. The result also implies that there was little variation in the values of conditional and unconditional grants for all the 47 counties. Value of kurtosis for conditional and unconditional grants given to County governments was 5.733 which exhibited a leptokurtic distribution exhibiting thin tails.

4.5 Allocative Efficiency

The devolved system of governance that has changed significantly in recent years calls for empirical assessments of the performance and efficiency of the various public sector entities and their activities. This section discusses the allocative efficiency features as operationalized in chapter three section 3.7.2 and includes, stakeholders engagement, expected benefits and government responsiveness.

4.5.1 Stakeholders Engagement (Preference Matching)

To assess the extent of citizens power in decision-making, the researcher gathered recorded forums for project proposals and prioritization by the County governments. The public expenditure management calendar provides several platforms for consultation and discussion with the general public, civil society organizations and professional bodies on various fiscal and policy issues (CoK 2010; PFMA, 2012). The extent of adoption of proposals and recommendations from the various public forums is the measure of preference matching or priority setting. It is reflected by the proportion of formal and informal engagements in prioritizing citizens' needs to be contained in County Integrated Development Plans (CIDP), Annual Development Plans (ADP) and County Fiscal Strategy Papers (CFSP) as well as Budget Estimates in accordance with the statutory requirements spelt out in law (Appendix VII). The extent of engagements were reflected in the table below:

Table 4.5: Stakeholders Engagement (Meetings)

Class Interval	Frequency	Percentage
46-91	35	14.89%
92-136	65	27.66%
137-181	50	21.28%
182-226	50	21.28%
227-271	15	6.38%
272-316	5	2.13%
317-361	10	4.26%
452-496	5	2.13%
Total	**235**	**100%**
Arithmetic Mean	166.5957	
Standard Deviation	77.20316	
Highest	459	
Lowest	54	
Skewness	1.37	
Kurtosis	2.916	

Source: Author (2018)

Table 4.5 above summarizes the findings with regard to various descriptive statistics associated with preference matching. It can be observed that the minimum value was 54 and was associated with two counties namely Isiolo and Lamu counties, while the maximum was 459 that was attributed to Nairobi County. A wide gap in terms of stakeholder consultations between these counties clearly shows that the former two counties might not have been keen to ensure stakeholders get involved in priority setting of programs to achieve ownership and smooth running of the County governments. In comparison, Nairobi seems to have made significant efforts in getting citizens involved in proposing projects to be implemented by the County government. The value of arithmetic mean for preference-matching was 166 meetings and the standard deviation was 77.2. The value of skewness as summarized in table 4.11 above was 1.37, showing that the distribution curve was right skewed while the value of kurtosis was 2.916, showing that the distribution curve was leptokurtic.

4.5.2 Expected Benefits

The concept of citizen participation is captured through stakeholders engagement with the CGs and moves beyond mere consultation, to more direct forms of influence over spending and policy decisions (Goetz & Gaventa, 2001). Effective participation requires increased skills and capacity for stakeholders to engage and also appropriate sustainable policies supported by a legal framework and institutional, administrative arrangements (UN, 2007). The structure and key areas of focus include the discussions of annual County Fiscal Strategy Papers (CFSP), the annual County Development Plans (CDP), the annual County Budget and Outlook Paper (CBROP), the annual Budget Estimates and County Appropriation Act (CAA) plus the annual County Finance Act (CFA).

All of these statutory documents call for a minimum required level of public discourse in each County to ensure transparency and openness (PFMA, 2012; CGA, 2012; CoK, 2010). Citizens expect their welfare to improve and a reduction of poverty levels accruing from government activities as spelt out in the various Acts and policy papers (Appendix VIII). Table 4.6 below:

Table 4.6: Expected Benefits (Improved Wellbeing)

Class Interval	Frequency	Percentage
21.9-29.2	5	2.13%
29.3-36.5	15	6.38%
36.6-43.8	35	14.89%
43.9-51.1	55	23.40%
51.2-58.4	50	21.28%
58.5-65.7	15	6.38%
65.8-73.0	25	10.64%
73.1-80.3	10	4.26%
80.4-87.6	10	4.26%
87.7-94.9	15	6.38%
Total	**235**	100%
Arithmetic Mean	55.04468	
Standard Deviation	16.44463	
Highest	93.5	
Lowest	27.8	
Skewness	0.636	
Kurtosis	-0.276	

Source: Author 2018

Table 4.6 above shows that the minimum value was 27.8 attributed to Nairobi County, while the highest value was 93.5 attributed to Turkana County. The findings indicate that the value of arithmetic mean was 55.0447, and the value of standard deviation was 16.587.

The value of skewness as summarized in table 4.6 above was 0.636, indicating that the distribution curve for the values obtained for poverty indices was slightly positively skewed but at the same time, the curve was closer to being symmetrical in comparison with other indicators. Kurtosis as indicated was -0.276 showing that the distribution curve was platykurtic (due to the negative value of kurtosis) and within acceptable limits.

4.5.3 Government Responsiveness

Being responsive and accountable to the electorate is one of the most crucial elements of governance and County Governments are required to constantly seek approval of residents and County assemblies in their expenditure and taxation plans. Locally preferred projects and locally imposed taxes make locally elected officials more responsive and accountable to the public for the public goods they deliver leading to more efficient service delivery and higher revenue collection (Bahl, 2008). County Governments are required to provide adequate feedback mechanisms on a regular basis by publishing reports particularly when citizens raise issues of concern. This compliance is measured by the approval and enactment of five (5) key annual legislations and policy documents at stipulated intervals. These include County Fiscal Strategy Paper, County Appropriation Acts, County Developments Plan, County Finance Acts, County Budget and Outlook Papers among others (Appendix IX).

Table 4.7: Government Responsiveness (Statutory Compliance)

Class Interval	Frequency	Percentage
0-4	15	6.38%
5-9	220	93.62%
Total	**235**	100%
Arithmetic Mean	4.936	
Standard Deviation	0.2471	
Highest	5	
Lowest	4	
Skewness	-3.687	
Kurtosis	12.110	

Source: Author (2018)

As indicated in table 4.7 above, it can be seen that the value of the mean was 4.936 while the maximum was 5. The minimum was 4 and the standard deviation was 0.2471 during the period under study. The study findings indicate that government responsiveness was a near normal distribution throughout. Skewness was -3.687 while kurtosis was 12.110. This confirms that nearly all the counties complied with the minimum statutory requirements of producing a County Fiscal Strategy Paper (CFSP), a County Appropriation Act (CAA), a County Development Plan (CDP), a County Budget Review and Outlook Paper (CBROP) and a County Finance Act (CFA) each year to avoid unnecessary disruptions or shutdown.

4.6 Public Governance

As indicated earlier in chapter three, public governance was operationalized based on Kaufmann, Kraay, Zoido-Lobaton (1999a) to include the capacity and competency of human capital in an entity, which is crucial in the execution of government activities; accountability and effectiveness of government structures which determines the efficiency, policies and impact of its actions; applicability and legislation of necessary legal framework to guide oversight and compel compliance. United Nations (2007) holds that good public governance heralds and underpins good corporate governance and this is the bedrock for viable and prosperous economies.

4.6.1 Capacity of Human Capital

A good and vibrant public administration accompanied by a well-functioning executive and a well-educated, highly skilled population is considered a prerequisite to the sound running of economic activities (Herrera, 2005). The Constitution of Kenya (2010) requires officers in the public service to be diligent, competitive and highly productive in performance of their duties. Productivity and performance is one of the principles considered in the determination of their pay scales. This research used capacity of human capital to refer to competency and effectiveness of professionals, managers and other personnel occupying the various positions in the

County Government responsible for managing operations. The managerial capacity of County Governments was assessed by measuring the absorption levels of resources made available to the County for utilization each year. The absorption rates are operationalized in accordance with the Office of Controller of Budget Implementation Report which ranks performance in percentages (2014-2018) Appendix (X).

Table 4.8: Frequency of Absorption Rates

Class Interval	**Frequency**	**Percentage**
0.424-0.477	15	6.38%
0.478-0.530	15	6.38%
0.531-0.583	30	12.77%
0.584-0.636	45	19.15%
0.637-0.689	50	21.28%
0.690-0.742	30	12.77%
0.743-0.795	25	10.64%
0.796-0.848	10	4.26%
0.849-0.901	5	2.13%
0.902-0.954	5	2.13%
Total	**235**	100%
Arithmetic Mean	0.647469	
Standard Deviation	0.10681	
Highest	0.9308	
Lowest	0.4504	
Skewness	0.188	
Kurtosis	-0.139	

Source: Author (2018)

Table 4.8 shows a summary of descriptive statistics for human capital which is measured by absorptive rates. Clearly the minimum value was 0.45, while the maximum was 0.93 that were associated with Uasin Gishu and Bomet counties respectively. This is a difference that is an indicator of how County governments exhibit their capacity and competence in managing and implementing public expenditures and public affairs. The value of arithmetic mean was 0.6475.

Results from the table also show that the value of standard deviation for human capital ratio was 0.107, implying that there was little variations in the data provided for absorptive rates. The value of skewness for this measure was 0.188, indicating that the distribution curve was positively skewed. The value of kurtosis for absorptive rates was -0.139, a clear indicator that the distribution curve was platykurtic and that the peak of distribution for this variable was low with thick tails.

4.6.2 Accountability

Good governance is now widely recognized as a positive contributor to development efforts and should therefore be a major plank in the development strategies in order to achieve rapid and sustainable growth targets (KIPPRA, 2009). Accountability is the practice of ensuring that both governments and its agents regularly account to the public and other stakeholders for their actions. The proportion of local revenues collected and potential targeted for collection by County Governments is a very crucial ingredient as it demonstrates the effort and capacity as well as the degree of compliance and willingness of residents. This is the indicator computed to reflect ability and accountability (Appendix XI).

Table 4.9: Accountability Index

Class Interval	Frequency	Percentage
0.198-0.297	10	4.26%
0.298-0.396	10	4.26%
0.397-0.495	15	6.38%
0.496-0.594	45	19.15%
0.595-0.693	85	36.17%
0.694-0.792	25	10.64%
0.793-0.891	25	10.64%
0.892-0.990	15	6.38%
1.090-1.188	5	2.13%
Total	**235**	100%

Arithmetic Mean	0.644012
Standard Deviation	0.172329
Highest	1.133838
Lowest	0.243596
Skewness	0.288
Kurtosis	0.506

Source: Author 2018

From table 4.9 above, it can clearly be seen that the lowest values of the accountability index were less than 0.4 while the maximum value was more than 1.0 (See Appendix XI). The findings also indicate that the value of the arithmetic mean was 0.644 and the value of standard deviation was 0.172.

The study findings show that the value of skewness for accountability index was 0.288 showing that the distribution curve for accountability index was not symmetrical and tapered to the right. The value of kurtosis was 0.506, an indicator that the distribution was leptokurtic implying that majority of the values were concentrated near the center. Indeed 75% of the counties had their indices between 0.4 and 0.8.

4.6.3 Applicable Laws

Under the devolved system of governance, the role played by oversight institutions has become more critical than before. There is greater need to conduct periodic audits and verification to ascertain adherence to public service delivery standards. This is carried out through spot checks which cover processes, systems procedures and legislations involved in service delivery (CAJ, 2016). Existence of a legal and institutional framework for consistent decision making across all levels of government and jurisdictions is imperative (Appendix XII).

Table 4.10: Enactment of New Laws

Class Interval	Frequency	Percentage
8.667-11.556	25	10.64%
11.557-14.445	70	29.79%
14.446-17.334	45	19.15%
17.335-20.223	30	12.77%
20.224-23.112	30	12.77%
23.113-26.001	10	4.26%
26.002-28.890	5	2.13%
28.891-31.779	15	6.38%
34.669-37.557	5	2.13%
Total	**235**	100%
Arithmetic Mean	17.57447	
Standard Deviation	6.022553	
Highest	38	
Lowest	12	
Skewness	1.069	
Kurtosis	0.73	

Source: Author (2018)

As indicated in table 4.10 above, that the minimum value was 12 and the maximum was 38. The minimum values were associated with three counties namely Kwale, Lamu as well as Tharaka Nithi, while on the other hand, the maximum value was associated with Machakos County. This therefore shows that the three counties had not made much progress in terms of drafting and enacting new laws to run County governments by the time of the study. With Machakos County, this clearly demonstrates that indeed the County had made serious efforts towards ensuring that new laws are enacted to ensure smooth running of the devolved unit. Findings summarized in table 4.10 above also show that the value of the arithmetic mean for enactment of new laws was 17.5 while standard deviation was 6.07. This clearly indicates that indeed enactment of new laws had the highest variations in the values obtained under this concept in comparison with the other two indicators under public governance, namely human capital and accountability.

The value of skewness for enactment of new laws was 1.069 whose positive value indicates that the distribution curve for the values of enactment of new laws in the County governments was right skewed. This implies that there was more asymmetry in the data obtained for enactment of new laws in comparison with the other two indicators. The value of kurtosis was 0.73, showing that the distribution curve for enactment of new laws was leptokurtic, implying a higher peak compared to that of accountability index and that of human capital.

4.6.4 Estimates of Performance of County Governments

The concept of performance and wellbeing measurement is really about the pursuit of value for money whereby the best achievable relationship is achieved between actual delivery and potential delivery (Ludgerschuk & Tanzi, 2005). Measurement of performance is necessary to be able to attribute changes in outputs to both inputs and other external factors. The extent to which the poverty levels rises or falls with average expenditures is one determinant of how County governments can respond and target certain pockets or regions within their jurisdictions to spur growth or reduce poverty (KNBS, 2019).

In assessing performance of public goods provision, parameters are set that focus on total public spending and the spending categories and relate it with the intended outputs and outcomes (Kristina, 2005). The composite performance indicator of wellbeing measured is understood to demonstrate a governments’ ability to establish and focussed predictability of outcomes in the institutional and policy environment occasioned by an economically efficient system of transformation and distribution as well as fair and consistent, reliable legal system (Afonso, Schuknecht, Tanzi, 2006).

The theory of optimum human welfare stipulates that the transfer of resources effected by the state through the transformation system is the one that secures the maximum socio-economic advantage from the operations which it conducts and minimizes poverty (Dalton, 2018). When the government incurs public expenditure, some utility is created and the revenue expenditure programme of governments should thus be adjusted in such a way as to maximize utility and minimize disutility. This then allows for the measurement of well-being which is predicated on such aspects as socio-economic, cultural and psychological judgements about what is worth seeking in life, for both individuals and communities (Sen, *et al.*2009).

The study aimed to compute the wellbeing index, as a composite indicator of performance of every County in Kenya. The various indicators are founded on the believe that measuring human wellbeing goes beyond subjective reports and prescriptions to include objective measures of the extent individuals "opportunity set", and the ability to make choices of those opportunities (Sen et al., 2009). The counties were then ranked according to their wellbeing status as shown in Appendix VIII. The poverty headcount model as shown in section 3.8.1 was used to compute the wellbeing indices for the 47 counties in accordance with KNBS (2016).

Table 4.11: Distribution of Wellbeing Indices of Counties

Class Interval	Frequency	Percentage
0.073-0.146	10	4.26%
0.147-0.219	5	2.13%
0.220-0.292	15	6.38%
0.293-0.365	15	6.38%
0.366-0.438	25	10.64%
0.439-0.511	40	17.02%

0.512-0.584	20	8.51%
0.585-0.657	60	25.53%
0.658-0.730	30	12.77%
0.731-0.803	15	6.38%
Total	**235**	**100.00%**
Arithmetic Mean	0.509	
Standard Deviation	0.164	
Highest	0.782	
Lowest	0.125	
Skewness	-0.636	
Kurtosis	-0.279	

Source: Author (2018)

Table 4.11 above presents a summary of the descriptive analysis for well-being scores for all the 47 counties. Clearly the minimum score of County Government well-being index which was 0.125 was a score for Turkana County while the maximum value was 0.782 for Nairobi County. The ratios indicate the extent of increase of welfare as depicted by a reduction of poverty levels, a criterion attributed to the performance of the transformation process. Hence Nairobi registered the greatest effect to wellbeing by inducing the least impact on poverty index to achieve the highest score while Turkana has the least impact on efforts of increasing wellbeing levels.

The value of the standard deviation for the wellbeing scores was 0.165. In considering the variation of well-being scores alone as the dependent variable of the study, it can be observed that the coefficient of variation (CV) which is obtained by dividing the standard deviation by the mean and expressing it as a percentage was 32.27% which shows that the variations in the well-being scores were not so high as it was below 50%. The value of skewness for the well-being scores was _.636. Since the value was negative, it can be concluded that the distribution curve for wellbeing scores was negatively skewed and the tail was slightly tapered towards the left. The table shows the value of kurtosis for the well-being scores was -2.701. This negative value implies that the distribution of the data for well-being scores was platykurtic and almost normally distributed with about 60% of the counties scoring between 0.4 and 0.7.

4.7 Diagnostic Tests on County Government Panel Data

4.7.1 Results of Normality Test

The statistical analysis was conducted in Stata statistical software where the test statistic of Shapiro-Wilks was used to establish whether data for the variables was normally distributed. The results of this analysis were therefore summarized in table 4.12 below:

Table 4.12: Tests for Normality

Variable	Obs	Wilk	Prob>z
Wr	235	0.95860	0.09466
UB	235	0.90354	0.06322
LR	235	0.35068	0.08310
TG	235	0.91653	0.07216

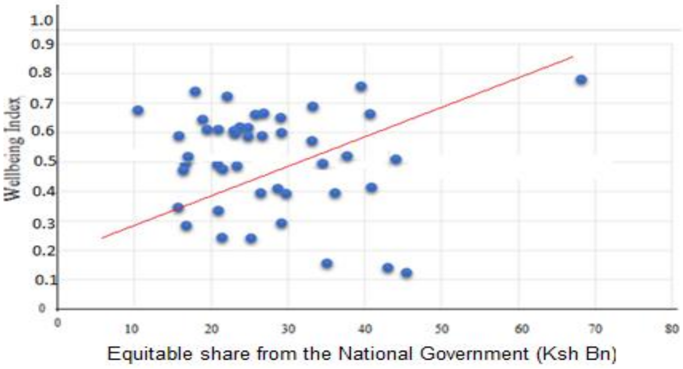
Source: Author (2018)

Since the chosen normality tests are all hypothesis tests, they test a null hypothesis against alternative hypothesis for each test. The cut point for this test is 0.05. The null hypothesis of this test states that the variable has a normal distribution against alternative which is non-normal. As summarized in table 4.12 above, it was clear that the normality tests conducted on the data for the independent variables namely equitable share from the national government, local revenue collection by the County government, conditional and unconditional grants given to the County governments and the dependent variable (wellbeing index) show that there was normality in the data distribution as all values of alpha are greater than 0.05. In other words the various data collected was normally distributed and met the conditions of normality and hence suitable to be included in the multiple linear regression model. Tests for normality and other assumptions must be taken seriously in order to make it possible to draw accurate and reliable conclusions about the study results.

4.7.2 Linearity Tests Results

Generally the procedure for establishing linearity comprises of generating plots between each of the independent variables against dependent variable, or it can be established by plotting each of the independent variables or the predictors against the residuals (Damon, 2017). In this study the procedure for conducting linearity comprised of generating a scatterplot between each of the independent variable against the dependent variable. Consequently, to establish linearity was checked by examining whether the data points displayed conform to the linearity requirements or not, implying existence of a mathematical function which can be graphically represented as a straight line.

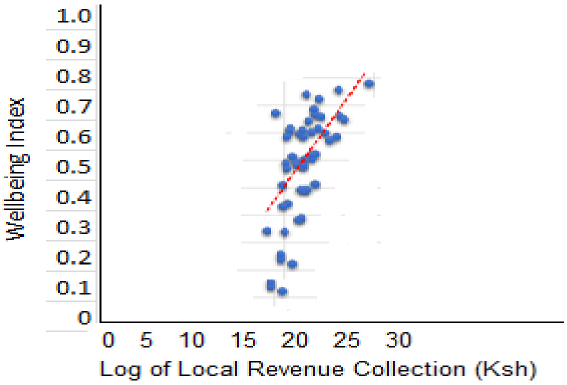
Figure 4.1: Plot for Equitable Share and Wellbeing Ratio



Source: Author (2018)

Figure 4.1 above clearly shows that there is a fairly linear relationship between equitable share from the national government as the independent variable and wellbeing scores. It is important to note that the composite indicator of wellbeing is the result of efforts to reduce poverty levels and assess inequalities in each County with respect to the key dimensions associated with well-being. This therefore shows that the data for equitable share from the national government meets the conditions of linearity which is essential in conducting multiple linear regression analysis.

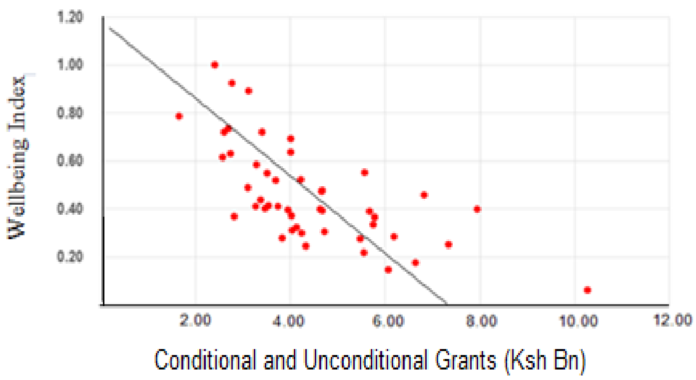
Figure 4.2: Plot for Local Revenue Collections and Wellbeing Ratio



Source: Author (2018)

Figure 4.2 above clearly shows that the values of the well-being scores for the 47 County government forms a linear relationship in the positive direction between the well-being scores and the revenue collection. It indicates that local revenue collections by the County governments as the independent variable and wellbeing scores have a linear relationship, hence meeting the conditions of linearity required in order to conduct multiple linear regression analysis. However it is noteworthy that there are a few outliers which can be explained by their prevalent unique factors such as being urban centers or cities.

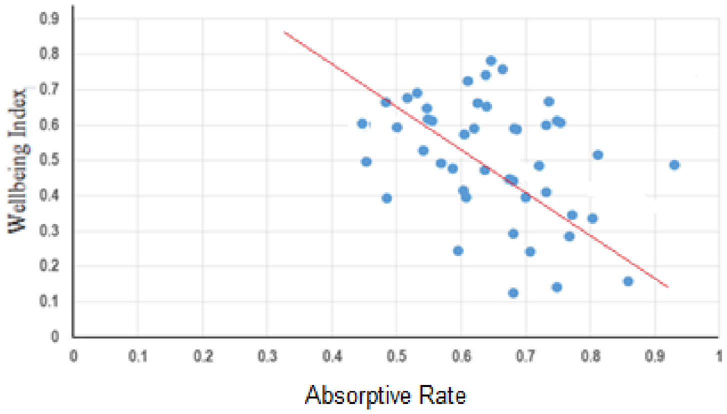
Figure 4.3: Plots for Conditional and Unconditional Grants



Source: Author (2018)

In figure 4.3 above it can also be shown that indeed the relationship between conditional and unconditional grants given to the County governments and wellbeing scores is fairly linear which therefore meets the conditions of linearity required in order to conduct multiple linear regression analysis.

Figure 4.4: Plot for Absorption Capacity and Wellbeing Ratio



Source: Author (2018)

Figure 4.4 above shows a linear relationship that is downward sloping between absorption capacity of human capital and wellbeing ratio. It is notable that the human capital measured as the capacity and ability to utilize all the budgeted funds in an year recorded fairly high scores for majority of the counties between 50% and 80%. The two variables also meets the conditions of linearity essential for conducting further computations.

Figure 4.5: Plot for Accountability Index and Wellbeing Ratio

Source: Author (2018)

Figure 4.5 above depicts an upward sloping linear relationship between accountability index and wellbeing index. In this study accountability index is measured as the ability and willingness of County governments to achieve their stated targets in terms of local revenue collection. The figure shows that majority of the counties that achieved accountability index of between 50%-80% returned a high wellbeing score of between 0.2 to 0.7 and met the linearity condition essential for further multiple regression computations.

4.7.3 Multicollinearity Results

In interpretation of the variance inflation factor, DeForest *et al.,* (2018) maintain that a variance inflation factor that approaches 10 implies a severe multicollinearity and a near complete correlation between a variable and a linear combination of the other independent variables in the regression model. It is therefore important that the value of the variance inflation factor is less than 10 or the reciprocal of it which is sometimes referred to as tolerance, has to be less than 0.1.

Table 4.13: Results of Multicollinearity tests

Variable	VIF	1/VIF
Equitable Share (UB)	6.56	0.152360
Local Revenue (LR)	1.68	0.593864
Transfer Grants (TG)	1.20	0.834365
Allocative Efficiency (AE)	5.99	0.166905
Public Governance (PG)	1.05	0.954776
Mean VIF	3.296	

Source: Author (2018)

As indicated in table 4.13 above, since all the values of variance inflation factors were below 10, it can be confirmed that indeed they are not significant in the correlations among the independent variables which were used in the model namely equitable share from the national government, conditional and unconditional grants as well as local revenue collected by the County governments. Further, allocative efficiency and public governance were also tested as they were considered to have acted as predictors at one point or another. This therefore justifies the validity of the findings of the multiple linear regression model based on the five independent variables.

4.7.4 Autocorrelation Test Results

Table 4.14 below provides the results for autocorrelation tests on the residuals.

Table 4.14: Autocorrelation Tests on Residuals

Durbin-Watson d-statistic (4, 235) = 1.9032

Source: Author (2018)

Indeed the serial correlation on the residuals was not statistically significant at 0.05 % level of significance given that a number of empirical studies give the normal range for the value of the statistic as 1.5 to 2.5 (DeForest *et al.*, 2018). Since the calculated value of the test statistic for this study was 1.9, it can be said that indeed there was no statistically significant serial correlation between the residuals of the regression model based on the equitable share from the national government, conditional and unconditional grants as well as local revenue collected by the national government as the independent variables. Hence independence of the residuals is maintained.

4.7.5 Unit Root Test Results

In interpretation of the findings with regard to the unit root test, this was conducted by use of Augmented Dickey Fuller (ADF) technique which tests the existence of stationarity. It tests at the cut off of 0.05 in order to reject the null hypothesis for lack of stationarity. The findings are summarized in table 4.15 below. The results reveal that all the nine variables for the 235 observations yielded p-values that were less than the 0.05 level of significance implying that they all met the required condition of stationarity.

Table 4.15: Unit Root Test

Variable	ADF Test	P-Value (95 % confidence interval)	Remarks
WI	-0.208	0.05	Stationary
UB	-0.531	0.02	Stationary
LR	-0.532	0.00	Stationary
CG	-5.941	0.04	Stationary
SE	-0.539	0.01	Stationary
EB	-4.464	0.006	Stationary
GR	-3.225	0.00	Stationary
HC	-5.43	0.011	Stationary
AI	-2.216	0.01	Stationary
AL	-12.076	0.003	Stationary

Source: Author 2018

4.7.6 Heteroscedasticity Test Results

Table 4.16: Results of Tests for Heteroscedasticity

Breusch-Pagan / Cook-Weisberg test for heteroskedasticity
Ho: The residuals of the regression are homoscedastic.
Variables: fitted values for wellbeing 2016
chi2(1) = 0.67
Prob > chi2 = 0.4119

Source: Author (2018)

Table 4.16 above provides results for tests of heteroscedasticity which was carried out on the basis of the null hypothesis that indeed the residuals of the regression model are constant in the given set of data. As clearly summarized in the table above, the value of the test statistic which is the chi-square equals to 0.67, which furthermore has a p-value of 0.4119 which is above 0.05. This leads to failure to reject the null hypothesis (H_0), in other words there is constant variance in the datasets or the data is homoscedastic.

4.8 Summary of Results and Implications

This chapter presented results of the study from the various data sets. The results were analysed and summarized by use of various descriptive statistics obtained from all the variables in the study after having conducted various diagnostic tests on the panel data. The analysis was done by use of graphical and distribution curves, the mean, standard deviation, maximum and minimum values, skewness and kurtosis. The results are crucial as they can be used to validate or corroborate existing relationships among various study variables.

Mugenda and Mugenda (2003) posits that accurate descriptive statistics underlie the basic features of collected data on the various variables and provides the basis for conducting further analysis on the data. The statistics also simplify and describe the features and status of the current data. The study achieved a very high response rate of 100% attributed to the fact that the data and information sought is readily available as official documents in various government departments and agencies.

The descriptive statistics of fiscal decentralization shows that Nairobi County received the highest equitable share totalling (Ksh 68.128Bn), the highest conditional grants totaling (Ksh 102.662 Bn) and also raised the highest own local revenue amounting to (Ksh. 54.275 Bn). This is in sharp contrast to the lowest equitable share allocation that went to Lamu County totalling (Ksh 10.431 Bn), which also received the minimum conditional grant of Ksh 16 Bn. Tana River County registered the least local revenue collection of Ksh 177 million. Both equitable and conditional grants depicted a relatively normal distribution with a skewness of 1.448 and 1.276 respectively, which is within the acceptable range of ±1 to ±2. This implies that County governments with higher populations attracted relatively higher amounts of both equitable and conditional funds as compared to counties with lower populations. The size of population has often been used as a criterion for resource distribution owing to the assumption that it is amenable to economies of scale and enables governments to cluster and deliver easily local public goods which enhances its performance.

The distribution of local revenue collection however was significantly asymmetrical with a skewness of 5.772 and kurtosis of 36.385. This is a clear demonstration that since each County government made its own decisions on revenue targets and applied its respective capacities/abilities, the results were as varying as the counties themselves. It is further a reflection of the difficulty of collecting of local revenue faced by majority of the counties. (Appendix V).

The implication is that a good number of County governments can become entirely dependent on the national government funding making them vulnerable to the broader strategic decisions of the national government. The findings can also be associated with other logical interpretations since increased political autonomy and power at the devolved level have also affected the revenue base of local government. This is because tax assessments and prescriptions tend to have undue influence by political leaders who do not want the electorate to bear the brunt of meeting the costs of goods provision (Okididi, 2006).

A pattern can be discerned related with the electoral cycle where a financial year of elections yield much lower local revenue collections. This calls for a uniform high level strategic decisions that requires the use or application of technology in the counties in order to address partiality and subjectivity in revenue collection. Incentives and sanctions should also be introduced to motivate County governments to achieve greater results locally and aim at becoming more autonomous and thus more stable. According to Daron and James (2013) a successful theory or hypothesis does not necessarily have to faithfully replicate its details so long as it provides a reliable and empirically well-grounded explanation for a range of processes and transformations while simultaneously clarifying the main variables at play.

The average wellbeing of County governments was found to be 0.5096 with Nairobi registering the highest wellbeing ratio of 0.782 and Turkana registering the least wellbeing ratio of 0.125. Notably over 70% of the counties scored between 0.4 and 0.6. The independent variables in the model were the equitable revenue, local revenue and conditional grants while the outputs were poverty indices, human development indices which together give an aggregate measure of wellbeing ratio. This implies that operationally, there were increased activities in terms of programs and projects with consequences in economic impact at the County levels. This results also confirm the theoretical proposition that the transformation process and related activities enable a yardstick competition between subnational governments, as voters can use the performance of neighbouring governments to make inferences about the competencies and/or benevolence of their own local leaders and officials (Besley & Smart, 2004).

CHAPTER FIVE

HYPOTHESIS TESTING AND DISCUSSION OF FINDINGS

5.1 Introduction

The study was to investigate the relationships amongst fiscal decentralization, allocative efficiency, public governance and the performance of County governments in Kenya. Various tests were conducted using regression analysis, correlation analysis as well as path analysis. The study adopted a P-value level of significance of 5% which is used to justify a claim of a statistically significant effect and which has become synonymous with $P < 0.05$ (Ronald et al., 2019; 1956; Tukur, 2008).

The P-value index measures the strength of evidence against the null hypothesis. The dependent variable for the study which was County Governments performance expressed as wellbeing indices for the 47 County governments in Kenya was computed by subtracting the values of poverty indices from 100 in order to come up with a value representative of the wealth level of a given County. The value is then transformed into a ratio between 0 and 1 ($W_i = 1 – P_i$) where W_i is wellbeing ratio and P_i is poverty index. This approach is important and was proposed by Ravallion (1998), Deaton & Zaidi (2002) and adopted by the Kenya National Bureau of Statistics as a measure of the wellbeing of any given County.

5.2 Correlation Analysis

The essence of conducting a correlation analysis was to compute the correlation coefficients, *r*, which gave information with regard to both the strengths as well as the direction of the relationship between the variables of the study. In the analysis, Pearson correlation coefficients were computed between the dependent variable which was County performance expressed as wellbeing ratios. The value of r ranges from -1 to +1 where values below zero (0) signify an inverse relationship while values above zero (0) signify a positive relationship. The independent variables were fiscal decentralization and specifically the three aspects namely equitable share from the national government (UB), local revenue (LR) as well as conditional and unconditional grants (TG). Table 5.1 below is the correlation matrix of Pearson correlation coefficients. Further, significant coefficients are flagged with asterisks (*).

The results of Pearson correlation coefficients for equitable share from the national government (UB), local revenue (LR), conditional and unconditional grants (TG), stakeholder engagement (SE), expected benefits (EB), government responsiveness (GR), human capital (HC), accountability index (A_i) and enactment of new laws (A_L) were included as shown in table 5.1. With regard to the direction of the relationship between independent variables and dependent variable, it is clear as summarized in table 5.1 that the first two positive values were associated with allocative efficiency with expected benefits having the highest positive coefficient of 0.5311 followed by government responsiveness with 0.3056. The next set of variables had negative correlation coefficients and hence indicating that there was a negative or inverse relationship between these variables and well-being index. In other words, a decrease or increase in any of these variables was associated with an increase or decrease in the well-being index respectively.

The variables with negative correlation coefficients included one variable under allocative efficiency which was stakeholder engagement (-0.7249). This was followed by conditional and unconditional grants with -0.6102, and equitable allocation from the national government with -0.5945. This was followed closely by local revenue with -0.4236 and enactment of new laws (-0.1255), and accountability index (-0.0682) which was the least negative correlation coefficient.

This therefore means that the highest positive correlation was associated with expected benefits of 0.5311, while the lowest negative correlation was associated with stakeholder engagement with -0.7249. In terms of statistical significance at 5% level of significance, it was clear that the correlation coefficients for stakeholder engagement, conditional and unconditional grants, equitable allocation from the national government, local revenue, government responsiveness as well as expected benefits were statistically significant while human capital, accountability index as well as enactment of new laws were not statistically significant.

Mwangi (2014) notes that correlation analysis helps in the establishment of how suitable data is, as well as regression analysis by ensuring that the criterion and the predictors have a relationship that is statistically significant. The question of multicolinearity of the predictors was also evident as no coefficients of any two dependent variables was more than 0.8 as shown in table 5.1

Table 5.1: Pearson Product Moment Correlation coefficients

Variable	Wellbeing Index
UB	-0.5945*
Sig. (2-tailed)	0.0000
LR	-0.4236*
Sig. (2-tailed)	0.003
TG	-0.6102*
Sig. (2-tailed)	0.0000
SE	-0.7249*
Sig. (2-tailed)	0.0000
EB	0.5311*
Sig. (2-tailed)	0.0001
GR	0.3056*
Sig. (2-tailed)	0.0367
HC	0.1608
Sig. (2-tailed)	0.2801 LP
AI	-0.0682
Sig. (2-tailed)	0.6489
AL	-0.1255
Sig. (2-tailed)	0.4007

Source: Author (2018)

5.3 Hypothesis Testing using Regression Analysis

The research was based on a null hypothesis that there are no significant relationships amongst the main variables. Multiple regression analysis was conducted in order to establish the statistical significance of the tests of the hypothesis. The most important is to note that two tables from the output of the STATA 14 statistical program were used. The first table was used to provide the model summary and the ANOVA values that showed the percentage of variations caused by both the model and also the residual; a ratio which is tested by use of the *F*-statistic, hence demonstrating the fitness of the model. The first table also shows the coefficient of determination r^2, which demonstrates percentage of variations in the criterion variable caused by variations in the predictor variables (explained variation), so that the remaining percentage is unexplained variation which is caused by other factors.

The second table comprised of coefficients of the regression model which were tested for significance by checking the column for the P-values. This is also critical in order to reject or fail to reject the null hypothesis. While stating the hypothesis, the null hypothesis assumed that the regression coefficient is not statistically significant hence assumed to be 0 (thus shown as Null hypothesis,) which is contrasted with the alternative hypothesis which shows that the regression coefficient significantly deviates from 0 at the set significance level.

5.4 Relationship between Fiscal Decentralization (FD) and Performance of County Governments in Kenya

The first objective of the study was to establish how fiscal decentralization affected performance of County governments in Kenya. To this end, a multiple linear regression model was used with the aid of STATA 14 statistical program to test if the relationship was statistically significant. The independent variable was Fiscal decentralisation while the dependent variable was performance of County Government measured by use of well-being index. Multiple regression analysis was used. The study aimed to test the following null hypothesis:

Hypothesis 1: The effect of fiscal decentralization on performance of County governments in Kenya is not significant.

The following model equation was used to describe the relationship between fiscal decentralization as independent variable and County government performance as defined in section 3.9, equation 3.2.

The first part of the analysis was to check for the model summary in order to establish the coefficient of determination, as well as the Analysis of Variance (ANOVA) table to show the goodness of fit of the model and the results are summarised in Table 5.2:

Table 5.2: Model summary and ANOVA table

Source	**SS**	**Df**	**MS**	**Number of obs = 235**
				F(3,231) = 30.48
Model	1.79443444	3	0.598144814	Prob > F = 0.000
Residual	4.53327965	231	0.019624587	R-squared = 0.2836
				Adj R-squared = 0.2743
Total	6.32771409	234	0.027041513	Root MSE = 0.14009

Source: Author (2018)

From the finding summarized in table 5.2 above, it is clear that the value of adjusted r-squared was 0.2743, which therefore shows that 27.43% of variation in the dependent variable is explained by independent variables, while 72.57% is caused by other factors. Furthermore, it is worth pointing out that the value of F statistic, $F(3,231) = 30.48$ had a p-value= .000, which was far less than 0.05 level of significance giving an indication that the model was fit to be used for prediction.

The next table 5.3 focuses on summary of regression coefficients which indicates the strength of relationships and more importantly, the checking of the respective values of significance by use of the P-values. The study tested the significance of separate indicators that make up fiscal decentralization. The specific indicators comprised of equitable revenue from national government (UB), local revenue collection (LR) as well as conditional grants and transfers (TG) from various sources. The table also provides a 95% confidence interval that were constructed in the statistical software in order to show the range in which the computed statistics lie.

Table 5.3: Coefficients of the Regression Model

Wellbeing Index	**Coef.**	**Std. Err.**	**T**	**P>|t|**	**[95% Conf. Interval]**	
UB	38.16894	6.048397	6.31	0.000	26.25187	50.08602
LR	0.0697662	0.007325	9.53	0.000	0.0553348	0.0841975
TG	0.0001425	0.001275	0.11	0.911	-0.0023695	0.0026545
_cons	0.6717895	0.030021	22.38	0.000	0.612639	0.73094

Source: Author (2018)

The study findings presented in table 5.3 indicate that block equitable transfers from national government as well as local revenues had a statistically significant effect on County governments' performance as their P-values were less than 0.05. Results show that the transitional grants component, whose P-value was more than 0.05 was not a significant predictor at the stated level of 5% ($p > 0.05$). Its beta coefficient of 0.0001425 was not different from zero and can be ignored. This led to rejection of the null hypothesis and acceptance of the alternate hypothesis implying that fiscal decentralization has a significant effect on the performance of County governments in Kenya.

5.5 Mediating Effect of Allocative Efficiency on the Relationship between Fiscal Decentralization and Performance of County Governments in Kenya

The second objective of the research was to examine the mediating effect of allocative efficiency on the relationship between fiscal decentralization and County governments' performance in Kenya. The procedure for determining the statistical significance of the mediating variable is a three-stage process that was proposed by Baron and Kenny (1986). The first stage is to determine the statistical significance of the correlation coefficients after regressing county performance ratios (dependent variable) on fiscal decentralization (independent variable) while holding the mediator constant. This is a akin to the process performed under the first hypothesis between fiscal decentralization and county performance. The relationship is expected to be significant.

The second stage entails confirming the statistical significance of the regression coefficient after regressing allocative efficiency (mediating variable) on fiscal decentralization (independent variable) to confirm whether the two are related in order to proceed to the next stage. The third and last stage entails regressing performance as the dependent variable on allocative efficiency (mediating variable) and fiscal decentralization (independent variable). In confirming the statistical significance, regression coefficient for mediating variable which is allocative efficiency should be statistically significant and furthermore, the absolute value of the regression coefficient of fiscal decentralization should be smaller in absolute terms than the original regression coefficient i.e. the relationship between fiscal decentralization and performance ratios. The study sought to test the following hypothesis:

Hypothesis 2: Allocative efficiency does not significantly mediate the relationship between fiscal decentralization and performance of County governments in Kenya.

The model equation used to describe the relationships is shown below as was defined in section 3.10, equation 3.7.

$$\mathbf{CP = \beta_0 + \beta_1\, FD + \beta_2\, AE + \varepsilon}$$

Table 5.4: Model Summary and ANOVA Table for Allocative Efficiency and Fiscal Decentralization

Source	SS	Df	MS	Number of obs = 235 F(1,233) = 66.63
Model	32141.3805	1	32141.3805	Prob > F = 0.000
Residual	112387.64	233	482.350388	R-squared = 0.2224
				Adj R-squared = 0.2190
Total	144529.021	234	617.645388	Root MSE = 21.962

Source: Author (2018)

In the second stage as shown in table 5.4 above, regression analysis was done to assess the relationship between allocative efficiency (mediating variable) and fiscal decentralization (independent variable) while excluding the main dependent variable (County performance). The results gives a summary of analysis of variance due to the regression model and also variance attributed to residuals (error). It can be observed from the table that the value of adjusted r^2=0.2190, indicating that 21.90% of variations in the dependent variable were caused by variations in the independent variables (explained variation), while 78.10% was caused by other factors (unexplained variation). It is also worth noting that the p-value for the *F*-statistic is less than level of significance 0.05, (*F*-value=0.000). This means that the model was fit for prediction of the relationship between the two key variables; namely, allocative efficiency and fiscal decentralization.

Table 5.5: Regression Coefficient of Allocative Efficiency on Fiscal Decentralization

AE	Coef.	Std. Err.	T	P>|t|	[95% Conf. Interval]	
FD	1.396322	0.1710545	8.16	0.000	1.059311	1.733333
_cons	61.64621	2.163465	28.49	0.000	57.38375	65.90866

Source: Author (2018)

Table 5.5 above shows that while using allocative efficiency as the dependent variable and fiscal decentralization as the independent variable, the regression coefficient (β = 1.396) whose p-value = 0.000 was statistically significant at the 5% level and meets the second condition that allocative efficiency should have a statistically significant coefficient; leading to the third and last stage

Table 5.6: Model Summary for Allocative Efficiency and County Performance

Source	SS	Df	MS	Number of obs = 235 F(1,233) = 0.67
Model	0.018041063	1	0.018041063	Prob > F = 0.4152
Residual	6.30967303	233	0.027080142	R^2 = 0.0029
				Adj R^2 = -0.0014
Total	6.32771409	234	0.027041513	Root MSE = 21.962

Source: Author (2018)

The table 5.6 above provides the model summary as well as the ANOVA results for the regression between the allocative efficiency and county performance as the dependent variable. Results show that the value of adjusted r^2= -0.0014, which can be expressed as 0.14% while the F statistics = 0.67 whose P-value of 0.4152 which is greater than 0.05 indicates that there was no significant relationship between the independent variable (allocative efficiency) and the dependent variable (county performance).

Table 5.7: Regression Coefficient for Allocative Efficiency and County Performance

Wellbeing Index	Coef.	Std. Err.	T	P>|t|	[95% Conf. Interval]
AE	0.0003533	0.0004329	0.82	0.415	-0.0004995 +0.00012061
_cons	0.4831828	0.03414337	41.15	0.000	0.4159129 0.55504427

Source: Author (2018)

Table 5.7 shows that P-value for allocative efficiency which is 0.415 is greater than 0.05 and is there not a good predictor. This implied that since the P-value was greater than 0.05 the third step did not qualify and the process stopped at this point.

This led to the conclusion that allocative efficiency does not have a statistically significant influence on the relationship between fiscal decentralization and County Governments' performance in Kenya. This therefore led to acceptance of the null hypothesis that states that the mediating effect of allocative efficiency was not statistically significant at the 5% level of significance.

5.6 Moderating effect of Public Governance on the Relationship between Fiscal Decentralization and Performance of County governments in Kenya

The third objective of the study aimed at establishing how public governance moderates the relationship between fiscal decentralization and performance of County governments in Kenya. In order to test for the moderating effect, the independent variable (fiscal decentralization), the moderating variable (public governance) as well as the interaction term were tested in the ordinary least squares multiple linear regression. The interaction term was computed in accordance with Baron and Kenny (1986), as a product of the independent variable, fiscal decentralization (FD) and the moderating variable, public governance (PG) while the composite values were arrived at by computing the arithmetic mean of the respective indicators of the main variables. To avoid the risk of multicolinearity, the interaction term introduced was tested by use of variation inflation factor (VIF) and found to be acceptable with values of less than 10. The study sought to test the hypothesis:

Hypothesis 3: Public Governance does not significantly moderate the relationship between fiscal decentralization and performance of County governments.

The model equation used to describe the relationship is shown below as was defined in section 3.11.

Hierarchical multiple regression analysis was employed in two steps that involved firstly regressing county performance against fiscal decentralization and public governance and secondly regressing county performance against fiscal decentralization, public governance and the interaction term (FD x PG). The results of the first step (model 1) are reported in table 5.8 below:

$$\mathbf{Wi = \beta_0 + \beta_1 FD + \beta_2 PG + \varepsilon}$$

Table 5.8: Model Summary for County Performance, Fiscal Decentralization and Public Governance

Source	**SS**	**Df**	**MS**	**Number of obs = 235**
				F(1,233) = 0.33
Model	0.17827311	2	0.008913655	Prob > F = 0.7209
Residual	6.30988678	232	0.271977788	R^2 = 0.0028
				Adj R^2 = -0.0058
Total	6.32771409	234	0.027041513	Root MSE = 0. 16492

Source: Author (2018)

Table 5.9: Regression Coefficients for County Performance, Fiscal Decentralization and Public Governance

Wellbeing Index	Coef.	Std. Err.	T	P>|t|	[95% Conf. Interval]	
FD	0.0009811	0.0012899	0.76	0.081	0.448	-0.0015603 +0.0035226
PG	0.011093	0.0053776	0.21	0.158	0.837	-0.0094858 +0.0117044
_cons	0.4933641	0.0365078	10.51	13.51	0.000	0.4214349 0.5652934

Source: Author (2018)

Tables above give a summary of analysis of variance due to the regression model and also variance attributed to residuals (errors). From Table 5.8 above, the value of adjusted r-squared was -0.0058 indicating that 0.58% of variations in the dependent variable were caused by variations in the independent variables, while 99.42% was caused by other factors. Furthermore, the table also shows that the F-Statistic = 0.33, and P-value > 0.05 was more than the level of significance hence indicating that the relationship between performance (dependent variable), and public governance (moderating variable) and fiscal decentralization was not significant at 5%.

The second step (model 2) is represented by the model below and Table 5.10.

$$\mathbf{Wi = \beta_{0\,+}\,\beta_1\,(FD) + \beta_2\,(PG) + \beta_2\,(FD\ x\ PG) + \varepsilon}$$

Table 5.10: Model Summary for County Performance, Fiscal Decentralization, Public Governance and Interaction Term

Source	SS	Df	MS	Number of obs=235 F(3,231) = 1.59
Model	0.128201381	3	0.042733794	Prob > F = 0.1920
Residual	6.19951271	231	0.026837717	R^2 = 0.0203
				Adj R^2 = 0.0075
Total	6.32771409	234	0.027041513	Root MSE = 0.16382

Source: Author (2018)

Table 5.10 above gives a summary of analysis of variance due to the regression model and also variance attributed to residuals (errors). From table 5.10 above the value of adjusted r-squared was 0.0075 indicating that 0.75% of variations in the dependent variable were caused by variations in the independent variables, while 99.25% was caused by other factors.

Table 5.11: Regression Ccoefficients for County Performance, Fiscal Decentralization, Public Governance and Interaction Term

Wellbeing Index	Coef.	Std. Err.	T	P>|t|	[95% Conf. Interval]	
FD	0.0085475	0.00487	1.76	0.081	0.0010482	0.0181433
PG	0.0117473	0.00829	1.42	0.158	0.0045866	0.0280812
Interaction_PG	0.0014334	0.000707	2.03	0.044	0.0000408	0.0028259
_cons	0.5768768	0.054873	10.51	0.000	0.4687619	0.6849916

Source: Author (2018)

Table 5.12: Summary of Regression Results of County Performance, Fiscal Decentralization, Public Governance and Interaction Term (FD x PG)

	Model 1	Model 2
Constant	0.4933641 (0.000)	0.5768768 (0.000)
FD	0.0009811 (0.448)	0.0085475 (0.081)
PG	0.011093 (0.837)	0.0117473 (0.158)
FD x PG	-	0.0014334 (0.044)
Adjusted R^2	-0.0058	0.0075
F-statistics	0.33 (0.7209)	1.59 (0.1920)

Source: Author (2018)
P-values are in parentheses

Table 5.12 above shows that the interaction term between fiscal decentralization and public governance (FD x PG) had a statistically significant effect at 0.05 level of significance with a p-value of 0.044. It can therefore be concluded that the introduction of the interaction term which was public governance on the relationship between fiscal decentralization and performance of County government was statistically significant. It increased the explanatory power by 1.33% (0.0075 – (-0.0058) = 0.0133). This therefore meant that public governance, comprising of human capital (HC), accountability index (Ai) and government applicable laws (A_l) had a statistically significant and positive moderating influence on the relationship between fiscal decentralization and performance of County governments in Kenya. This therefore led to the rejection of the null hypothesis ($H0_3$) and acceptance of the alternate hypothesis that predicts a significant moderating influence.

5.7 Investigate the Joint Effect of Fiscal Decentralization, Public Governance, Allocative Efficiency on Performance of County Governments in Kenya

The fourth objective of the study sought to establish the joint effect of fiscal decentralisation, public governance and allocative efficiency on the performance of County governments in Kenya.

The study aimed to test the hypothesis:

Hypothesis 4: The joint effect of fiscal decentralization, public governance and allocative efficiency on performance of County governments is not significant.

The following model equation was used to describe the relationship between fiscal decentralization, allocative efficiency, public governance, and County governments' performance as was defined in section 3.12, in equation 3.9.

$$W_i = \beta_0 + \beta_1 UB + \beta_2 LR + \beta_3 TG + \beta_4 SE + \beta_5 EB + \beta_6 GR + \beta_7 HC + \beta_8 A_i + \beta_9 A_l + \varepsilon_i$$

Table 5.13: Model Summary and ANOVA Table

Source	**SS**	**Df**	**MS**	**Number of obs = 235** **F(9,225) > 99999**
Model	6.32766846	9	0.703074273	Prob > F = 0.000
Residual	0.00004563	225	2.028E-07	R-squared = 1
				Adj R-squared = 1
Total	6.32771409	234	0.027041513	Root MSE = 0.00045

Source: Author (2018)

The analysis was made possible by use of the multiple linear regression model which comprised a total of nine variables namely equitable share from the national government, local revenue collections by County governments, conditional and unconditional grants given to the County governments, human capital, accountability index, enactment of new laws, stakeholder engagement, expected benefits as well as government responsiveness. Table 5.14 below shows that, the F-ratio was less than 0.05 implying that the model is fit for prediction. The value of adjusted r^2 = 1.000 implying that 100% of the variations in the dependent variable were explained by both the variations in the independent variable and the residuals. This is consistent with the big value of F statistic (9999) which gives the implication that the null hypothesis is rejected and the alternate hypothesis accepted.

Table 5.14: Coefficients for the Regression Model of Fiscal Decentralization, Public Governance and Allocative Efficiency and County Performance

Wellbeing Index	**Coef.**	**Std. Err.**	**T**	**P>|t|**	**[95% Conf. Interval]**	
UB	0.0291329	0.042469	0.69	0.493	-0.1128216	0.0545558
LR	0.00000882	2.86E-05	0.31	0.758	-0.0000476	0.0000652
TG	0.000000716	4.1E-06	0.17	0.862	-0.0000088	0.00000737
SE	0.000000825	1.06E-06	0.78	0.435	-0.00000126	0.0000029
EB	-0.0099961	2.94E-06	-3404.5	0.000	-0.0100018	-0.0099903
GR	0.0023725	0.002165	1.1	0.274	-0.001893	0.006638

HC	-0.000912	0.000314	-2.9	0.004	-0.0015308	-0.0002932
A_i	0.0001336	0.000183	0.73	0.466	-0.0002265	0.0004937
A_L	-0.0000115	5.05E-06	-2.27	0.024	-0.0000214	- 0.00000152
_cons	1.053486	0.006494	162.24	0.000	1.04069	1.066282
Adjusted r^2	1.000					
F-statistic				0.000		

Source: Author (2018)

The results indicate that County performance was significantly predicted by human capital (β = - 0.0009, P < 0.05), applicable laws (β = 0.00001, P < 0.05) and expected benefits (β = - 0.00999, P < 0.05). All the other six indicators were not statistically significant predictors (P > 0.05) of County Governments' performance, implying their respective regression coefficients were not very different from zero. But as the overall model had proved to be statistically significant at 0.05 the null hypothesis was rejected and the alternate accepted.

Table 5.15 Summary of Findings of Tests of Objectives and Hypothesis

Objective	Null Hypothesis (H_0)	Results	Interpretation
1) To examine the effect of fiscal decentralization and performance of County Governments in Kenya	H_{1a}: There is no significant relationship between equitable share (UB) and County performance	$F = 30.48$ $P < 0.05$ $\beta_1 = 38.16894$	The null hypothesis is rejected and alternate confirmed
	H_{1b}: There is no significant relationship between local revenue (LR) and County performance	$F = 30.48$ $P < 0.05$ $\beta_2 = 0.0697662$	The null hypothesis is rejected and alternate confirmed
	H_{1c}: There is no significant relationship between Transfer grants (TG) and County performance	$F = 30.48$ $P > 0.05$ $\beta_3 = 0.0001425$	The null hypothesis is not rejected and alternate not confirmed
2) To establish the mediating effect of allocative efficiency on the relationship between fiscal decentralization and County Governments performance	H_2: Allocative efficiency (AE) does not significantly mediate on the relationship between fiscal decentralization and County performance	$F = 0.43$ $P > 0.05$ $B_4 = 0.0002484$	The null hypothesis was not rejected and alternate not confirmed
3) Determine the effect of public governance on the relationship between fiscal decentralization and performance of County Governments in Kenya	H_3: Public governance (PG) does not significantly moderate the relationship between fiscal decentralization and County Governments performance	$F = 1.59$ $P < 0.05$ $B_5 = 0.0014$	The null hypothesis is rejected and alternate confirmed
4) To investigate the joint effect of fiscal decentralization, public governance and allocative efficiency on performance of County Governments in Kenya	H_4: The combined effect of fiscal decentralization, public governance and allocative efficiency is not significant on the performance of County Governments in Kenya	$F = 99999$ $P < 0.05$ $\beta_6 = -0.000912$ $\beta_7 = -0.0000115$ $\beta_8 = -0.0099961$	The null hypothesis is rejected and alternate confirmed

Source: Author (2018)

UB = (1) LR = (2) TG = (3) AE = (4) PG = (5)

5.8 Discussion of Findings

The overall objective of the study was to establish the relationships amongst fiscal decentralization, allocative efficiency, public governance and performance of County governments in Kenya following the adoption of a devolved system of governance which became effective in the FY 2013/2014. This section presents a concise discussion of the findings summarized in tables 5.1 - 5.15 above while aligning them with the results of tests of each hypothesis.

5.8.1 Fiscal Decentralization and County Governments Performance

The first specific objective was to examine the effect of fiscal decentralization on the performance of County governments as measured by wellbeing index. The study hypothesized that the effect of fiscal decentralization on performance of County governments in Kenya is not significant. The hypothesis is based on the 'Decentralization Theorem' (Oates, 1972) that roots for strengthening of economic systems and institutions at local levels as a prerequisite of meeting the basic needs of citizens. Its logic is anchored on the principle of subsidiarity which postulates that decisions ought to be handled at the lowest competent authority possible in order to focus the role of government to improving the well-being of residents (Oates, 1972).

The study findings presented in section 5.4 indicates that block equitable transfers from national government have a significant effect on the performance of County governments. The P-values of two of the key predictors (equitable share: 0.000; local revenue: 0.000) were less than 0.05 while only that of the conditional grants was more than 0.05. This led to the rejection of the null hypothesis. The value of adjusted r^2=0.2743 implied that 27.43% of the variations were caused by variations in the independent variable while 72.57% were caused by other unexplained factors.

Therefore, a positive relationship existed which was statistically significant since the p-value=0.000 was less than the significance level of 5%.

It can therefore be concluded that higher amounts of transfers from the national government to the devolved units will have a significant and positive influence on the performance of County governments in Kenya. The CRA (2014) held that by allocating a constant amount of funds to various Counties and giving increased flexibility, County Governments' are able to institute timely preparation of budgets and promote fiscal probity and responsibility, leading to enhanced performance.

The effect of fiscal decentralization on economic development has been a major focus of debate and discussions in the context of recent public discourse on reforms. This study has presented new empirical evidence for Kenya on this important issue and hence suggests that recent initiatives towards fiscal decentralization reforms may indeed stimulate faster economic growth. The findings are consistent with predicted expectations and hence provide compelling evidence that fiscal decentralization contributes to the improvement of wellbeing of citizens within counties (CoK, 2010). As expected the results also indicate that several other factors do play a role that has seen the results contradict some findings of previous empirical studies.

The theoretical prediction is that there are some public goods and services that are uniquely suited for specific regions and hence they could be more effectively provided if authority to plan, raise revenues and incur expenditures were transferred to the regional levels. Indeed the Constitution of Kenya (2010) transfers what is called fourteen (14) key functions to be managed and administered at the County Government level while quite many other functions that have interjurisdictional spillovers like defence, foreign policy, security and others are retained at the national level.

These results corroborate those by Bodman (2009) who in an analysis of fiscal decentralization and economic growth in Spain, found that decentralization has a negative effect on the aggregated, economy-wide level but a positive relationship for communities with a high degree of fiscal autonomy. In Bolivia, investments of devolved public funds changed strongly and positively throughout the country in favour of locally felt needs like education, water and agriculture after the 1994 reform program (Faguet, 2004). Afonso and Fernandes (2008), Prud'homme (1995) posit that an optimal degree of decentralization may determine expenditure productivity and performance at the local level as there is little to gain by shifting tasks to inefficient levels of government. The data for this research are historically and politically similar and hence serve to satisfy the findings.

5.8.2 Fiscal Decentralization, Allocative Efficiency and Performance of County Governments in Kenya

This second study objective was to determine the effect of allocative efficiency on the relationship between fiscal decentralization and performance of County governments in Kenya. The study hypothesized that allocative efficiency which comprised stakeholders' engagement (SE), expected benefits (EB) and government responsiveness (GR) does not significantly mediate the relationship between fiscal decentralization and performance of County governments in Kenya. The study results presented in section 5.6 indicates that since the value for the F-statistics was more than 0.05, then the model was not fit for prediction. The study further found that the regression coefficient for allocative efficiency (AE), which was the mediating variable, had an effect which was not statistically significant ($p > 0.05$). This result is similar to the findings of Crook and Sverrison (2002), who sought to compare and analyze the proposition that decentralization of government makes it more responsive to the needs of the citizens. They concluded that there is no general link between decentralization and development of more pro-poor policies and hence responsiveness to local needs. According to Taylor (1993), in a study to compare resource allocation and efficiency in Connecticut, the estimations revealed evidence of misallocations where communities appear to have allocated relatively too little resources to highways and education.

According to Leibenstein (1966), allocative efficiency is the core of household welfare and social economic wellbeing as it measures whether the available resource inputs are utilized in the most optimal proportions to generate the maximum outputs, given market prices. This theory is based on the logic of Pareto Optimality by Vilfrendo Pareto (1848 – 1923) which views allocative efficiency as the degree to which an organization or entity utilizes the inputs in various combinations to maximize outcomes while taking into account the level of technology and market prices. The County Government Act (2012) requires County governments to create awareness, facilitate citizens engagement and promote understanding of the various proposals planned for implementation.

Furthermore the Constitution (2010) and the Public Finance Management Act (2012) compels each of the 47 counties to publish information and to invite public inputs, proposals and recommendations during the planning, budgeting, implementation and audit stages of the budget process. This is aimed to achieve transparency and effectiveness in the usage of available resources leading to higher performance. Each County implements a fiscal and a development plan in accordance with the needs of locals aimed at improving their standards of living (CGA, 2012; PFMA, 2012).

The findings are however inconsistent with the results of Wallis and Oates (1988) study who found that the benefits attributable to fiscal decentralization were primarily due o heightened responsiveness by local governments to grassroots needs where levels of consumption were matched to the needs and aspirations of smaller, more homogenous groups. Similarly, in a sample study of 80 countries, Huther and Shah (1998) found a positive link between devolution and the indices of public engagement, social-economic development and an overall improvement of the quality of life.

Adan et.al (2008) using a panel data of 21 OECD countries also found results that strongly supports the evidence of a positive and significant effect of fiscal decentralization on government efficiency and resultant growth. Rugo (2013) held that subnational governments are more responsive to the needs of residents and take their preferences into account in determining the types of services to be provided and the optimal means of ensuring effective delivery. This study objective fails to confirm the theoretical as well as empirical propositions that allocative efficiency does have a positive influence on the relationship between fiscal decentralization and County government's performance in Kenya.

This finding can be attributed to lack of adequate stakeholder engagements at the county level leading to insufficient expression of citizens' needs and priorities. In addition, the indicators employed in the model may not have fully captured the relationship or some measurement aspects may not have been fully reliable. Nzau (2014) conducted a study on the effect of fiscal decentralization on the growth of Kenyan economy and found a negative relationship between the two variables.

5.8.3 Fiscal Decentralization, Public Governance and County Governments Performance in Kenya

The study objective number three was to establish the moderating effect of public governance on the relationship between fiscal decentralization and County governments' performance. Public governance was the moderating variable and comprises human capital (HC), accountability index (Ai) and applicable laws (AL). The study hypothesized that public governance does not significantly moderate between fiscal decentralization and performance of County governments in Kenya.

The study findings in section 5.5 show that the adjusted r squared = 0.0075, indicating that 0.75% of the variations in the dependent variable are explained by variations in the independent variable while the F-value = 0.1920 is more than the level of significance, 0.05. The regression coefficient of the interaction term has a p-value < 0.05 which indicates that public governance has a statistically significant influence on the relationship between fiscal decentralization and performance of County governments and this led to the rejection of the null hypothesis and acceptance of the alternate.

To ensure both upward and downward accountability, the Controller of Budget, Auditor-General and Members of County Assemblies (MCAs) are mandated and required to produce regular reports, as well as hold regular engagements with stakeholders and residents in regard to policies and expenditure proposals being implemented (CoK, 2010; PFMA, 2012). The findings are supported theoretically by Wallis and Oates (1988) who opined that decentralized provision of public goods provides a means of increasing the level of welfare by apportioning various levels of public outputs in accordance to the demands of locals. They noted that the magnitude of potential gains from such decentralization depends upon the variation in the optimal inputs and output combinations across jurisdictions. Akai and Sakata (2002) found that government organizations mattered greatly for local growth but the effects differed from one government unit to another by economic indicators between cities, municipalities, counties and rural areas. Cheema (2007) holds that fiscal decentralization is a conducive means of achieving good public governance by providing an institutional framework at the local level.

According to Sanjai and Brian (2008), public governance theory refers to the way influence and authority are exercised in the use of public resources to ensure social economic advancement. The theory is based on the logic of Rhodes (1996), who regards it as an interactive process that seeks to bring together various forms of partnerships for negotiations and systematic coordination. It seeks to establish and consolidate a level of mutual trust and understanding based on social-contract where communities and organizations develop a common vision and joint working frameworks that leads to formation of a self-governance (Rhodes, 1996). It is predicated on the logic that the constitution of a country is a social-contract vested with rights and obligations to govern, and when governments fail to deliver, citizens can withdraw their obligation to obey and even change leadership through elections or other means (Rawls, 1971).

Findings of a study by KHRC/SPAN (2010) noted that the greater democratic space introduced in Kenya by promulgation of the Constitution of Kenya (2010) was one that enabled citizens to take an active role in local and national institutions with a view to making a difference in governance and management of their affairs. The principal argument is that good governance ensures resources are managed for sustainable development of a country to achieve production efficiency and smooth delivery of goods and services (Muoria & Miringu, 2011). This must be done in a manner that promotes accountability and the rule of law by bringing government officials closer to the people, forcing them to become more responsible and accountable. (IEA/NCCK, 2011; Luiz & Barrenstein, 2000a).

However, Luiz and Barenstein (2000) observed that though fiscal decentralization does strengthen social capital and encourage political participation at the local level, electoral rules and other mechanisms are needed to encourage voter participation and improve accountability through more general and continuous involvement of CSOs in the governance process. Across counties, the various measures of fiscal decentralization are somewhat negatively correlated with low accountability outcomes that include bribery, corruption and poor governance (Fisman & Gatti, 2002). This result is corroborated by Devas and Grant (2003) findings on the impact of decentralization in six countries.

The study found that though the practice of democratic local governance and other initiatives encouraged public participation and elevated the level of representation, it failed in the aspect of empowerment, and more so, in making the distribution of benefits more equitable and poverty reducing. The finding in this study that are supported by other empirical studies underline the need to take cognizance of each study context, methodology adopted and also to ensure that indicators identified for examination are taken into account in order to make reliable and valid conclusions.

5.8.4 Fiscal Decentralization, Public Governance, Allocative Efficiency and County Governments Performance

The forth study objective was to investigate the joint effect of fiscal decentralization, allocative efficiency and public governance on performance of County governments in Kenya. The study hypothesized that the combined effects of fiscal decentralization, allocative efficiency and public governance on performance of County governments in Kenya is not significant. Kenya's Vision 2030 development blue-print aims to guide County governments on how to reduce the number of people living in absolute poverty to the smallest possible proportion (KNBS, 2016). The findings of the study as presented in section 5.7 indicates that the joint influence of the independent variables $r^2 = 1.000$, $F = 99999$, $P < 0.05$ which implies that there is a statistically significant relationship between fiscal decentralization, allocative efficiency, public governance and county performance at the 0.05 level of significance. It also identifies the three components in the model that had the greatest influence in the performance of County governments. Solow Growth Model (1956) holds that performance is affected by technological progress, growth in physical and human capital and availability of other natural endowments, all which require huge financial outlays.

The findings of this study imply that human capital, applicable laws and expected benefits are crucial constructs for policy makers as they lead to higher performance and benefits in the usage of available public resources and enhances wellbeing at all levels. Given that the overall model of fiscal decentralization, allocative efficiency and public governance have a statistically significant relationship with county performance ($P < 0.05$), the null hypothesis was rejected.

According to DFID (2011), there are different approaches to assessing performance of governments but the widely used method is the long run productive capacity of a country, which is normally measured in terms of GDP. Another most well-known approach is the UNs Human Development Index which is operationalized using objective data such as expenditure per capita, literacy and life expectancy rates.

The logic is based on the Solow Growth model which focuses on the relationship between a nation's long term investments in capital projects, living standards and economic growth (Mankiw, Roma, Weil, 1992). The theory postulates a continuous production function linking inputs of land, labour, capital and technological progress to outputs of public goods and services in the future. The model sought to explain how increased investments in both physical and human capital helps in the productive equation resulting in increased outputs and improved wellbeing of citizens.

The study findings also confirm the proposition by Vazquez-Martinez and McNab (2003) who hold that greater allocative and producer efficiencies are realized through decentralized expenditures particularly for certain public goods. According to Radulovic and Dragutinovic, (2015), SNGs can consolidate and balance their budgets by either cutting on public expenditures (i.e. reducing quantity and/or quality of services) or by raising more revenues (imposing new taxes) or operating much more efficiently.

These results further support the findings of Rondinello *et.al* (1983) whose case study of Papua New Guinea found that decentralization was more responsive to local needs by improving the capacity of regional administrators as well as the access of people in neglected rural areas to central government resources. Kamau, Wambua and Mwangulu (2014) in a study of citizens engagement in development issues found that allocative efficiency significantly ensures that resources are utilized in a manner that meets citizenry preferences in a pareto-optimal way. They also noted that services were delivered to the local people in a manner that was beneficial to them. The study objective and relationship were therefore established and found to be statistically significant and the null hypothesis rejected.

It must be noted that previous studies in the literature have not studied the four identified variables together as has been done in this study. While Nzau (2014) analyzed the effect of devolution of funds on performance of economy, Ndegwa (2002) focused attention on devolution and its effect on governance structures, performance of institutions and financial controls. Others like Faguet (2004) examined the relationship between fiscal decentralization and how governments respond to expenditure needs and priorities of locals and the general public. Bagaka (2008) investigated the effects of fiscal devolution through Constituency Development Fund (CDF) and how it affected the central governments operating budget.

CHAPTER SIX

SUMMARY, CONCLUSIONS AND IMPLICATIONS

6.1 Introduction

This study sought to establish the effects of fiscal decentralization, allocative efficiency, and public governance on the performance of County governments in Kenya. This was done by testing for hypothesis and presenting a summary of findings by use of descriptive statistics. The chapter also presents conclusions from the research as well as contributions to knowledge in areas of theory, policy and practice. The chapter concludes by discussing the limitations identified and offers future directions for further research particularly within the area of study context - Kenya.

6.2 Summary of Findings

The overriding objective of this study was to undertake a comprehensive analysis of the relationships of the various dimensions of fiscal decentralization, allocative efficiency and public governance and their influence on the performance of County governments in the delivery of public goods and services to residents. The performance ratios were computed by use of a formula as advanced by Ravallion (1998), Sen *et al.* (2000) and adopted by KNBS (2016) to compute the index of each County Government.

On a scale of 0-1, the performance that impacted the highest levels of wellbeing were Nairobi, Kiambu, Kirinyaga, Nyeri, Meru, Lamu, Muranga, Nakuru, Uasin Gishu and Mombasa scoring in the range of 0.782 - 0.652. In total, 54% of the counties scored a wellbeing ratio of more than 0.5.

In a study of public sector performance of 23 OECD countries, OECD (2003) found that the countries that have relatively small public sectors like Lamu in the case of

Kenya exhibit the highest overall performance. Surprisingly, Lamu County with the lowest population was scored very highly due to its extremely high expenditure per capita. They further observed that the level of urbanization and the corresponding quality of bureaucracy are very key factors in productive efficiency. This result is not surprising as it corresponds with the findings of Afonso, Schuknecht and Tanzi (2003), who held that Subnational governments with high densities are positively related to high performance as with dense settlements as they can structure and organize to take advantage of scale economies. The European Central Bank (2007) found that the most efficient and well performing counties displayed relatively small public sectors and they also boasted of public sector performance scores that were more than ten times the poorest performers.

The first research objective was to establish the relationship between fiscal decentralization and performance of County governments in Kenya. The findings indicated that block equitable transfers from the national government and local revenue collections had a statistically significant influence on the performance of County Governments'. Both had P-values that were less than 0.05 and only conditional grants had a p-value (0.911) which was not statistically significant. This therefore led to rejection of the null hypothesis and acceptance of the alternate hypothesis.

The second research objective was to determine the mediating effect of allocative efficiency on the relationship between fiscal decentralization and performance of County governments in Kenya. The study findings were that allocative efficiency did not have a statistically significant effect on the relationship at the 5% level of significance. The computed p-value of the F-ratio was 0.67, while the P-value was

0.4152, way beyond the 5% level of significance. This led to the failure to reject the null hypothesis.

The third research objective was to examine the moderating effect of public governance on the relationship between fiscal decentralization and performance of County Governments'. The findings of the study are that the moderating effect of public governance had a positive and significant influence on the relationship between fiscal decentralization and County governments' performance. Therefore, the null hypothesis was rejected and the alternate hypothesis accepted. The findings confirmed this hypothesis as the P-value for the interaction term was 0.044 which was less than 0.05

The fourth and last study objective was to investigate the combined effect of fiscal decentralization, allocative efficiency and public governance on the performance of County governments. The study findings show that the overall regression model had a statistically significance influence with the implication that human capital, enactment of new laws, and expected benefits all jointly influenced the performance of County Governments in Kenya. This led to the rejection of the null hypothesis.

6.3 Conclusions

The research makes several conclusions arising out of the findings. Based on the broad objective, the study concludes that there exists a positive and statistically significant relationship between fiscal decentralization and the performance of County governments in Kenya. This directly implies that an increase in the proportion of resource transfers from the national government would lead to increased performance of County governments. On the role of public governance, the study concludes that there was a significant positive influence on the relationship between fiscal decentralization and performance of CGs in Kenya.

Further, the research obtained quite surprising and puzzling results by concluding that Allocative Efficiency did not play a significant role in influencing the effect of the relationship between fiscal decentralization and CG performance. This goes against the findings of Baranky and Lockwood (2006) who found that allocative efficiency improves and increases the delivery of public goods and services by reducing wastage, corruption and poor performance. They claimed that goods provided by governments in localities will be better-matched to the preferences of residents in those areas; hence improving the performance of subnational governments.

In another similar study Faguet (2002) who conducted a study in Bolivia with the objective of testing whether decentralization made public investment more responsive to public needs, found that investment expenditures were strongly and positively related to real local needs. However, the study focused on urban municipalities only, ignoring the rest of the rural areas.

In the overall, the study concluded that fiscal decentralization, allocative efficiency and public governance variables do play an important role in predicting the performance of County governments in Kenya. This demonstrates that there is positive complementarity in the effects of these variables when taken and emphasized jointly. The proportion of equitable share, the local revenues collected, the degree of expected benefits and human capital were found to be particularly crucial in the prediction of performance of County Governments in Kenya. Though these findings may be comparable with previous study results in other countries, direct comparison is limited due to various factors such as context, timing and heterogeneity. County governments that embrace other economic actors and safeguard property rights; provide fair economic and trading practices and encourage local capital formation in the way of investments in new technologies and skills are more conducive to economic growth than those that structure their systems and operations to extract taxes from residents while failing to protect the property rights or provide incentives for economic activity (Daron & James, 2013).

6.4 Implications of the Study Findings

The research findings contained in this study have made enormous contribution in strengthening and guiding policy formulation and strategy both at the County and National government levels in terms of practice and planning. The study further extends and clarifies the findings of other studies by combining and analysing a multiplex of crucial variables taken at the same time. Some particular findings and implications are enumerated here below.

6.4.1 Implications of the Study for Theory

The findings of this research makes an invaluable contribution to the existing body of knowledge and literature, particularly in the area of public finance and devolution, allocative efficiency, governance and performance of County governments. Many similar studies have tended to focus on the developed economies whose historical backgrounds and motives are quite different from the prevailing circumstances in Kenya and developing countries. Furthermore, many of the studies undertaken have focused on only two variables. The Kenyan context is even more pertinent as there is scarcity of literature on the subject matter, especially on the relationships between allocative efficiency and County governments as well as public governance and County governments.

More specifically, the results of this study firstly, help illustrate and demonstrate the obtaining trends and dynamics in the identified variables as well as reveal the state of play in the Kenyan context. Secondly, the findings of the study helps to test the applicability of several theories such as the Solow Growth Model, Decentralization Theorem and Pareto theory in informing and shaping the formulation of policy-making on governance and public oversight at the SNG and grass root levels.

The results also help to validate and critique the conclusions and observations of previous study results in light of their diverse contexts and time horizons. Empirical study results show that fiscal decentralization and its implications is a slow and controversial process and its impact takes time to be recognized. Furthermore, its execution is vexed and complex, with far-reaching disruptions in the public expenditure management structures and procedures and requires careful attention.

Accountability and responsibility for performance and outcomes is equally likely to be a delicate subject with various units/ levels of government competing with one another for credit while at the same time laying blame on others when things don't work out. A further contribution by this study is that it unveils the amorphous demarcations of functional duties and responsibilities variously referred to as concurrent and residual duties (CoK, 2010) that straddle the two levels of government making it difficult to ascribe accountability and responsibility for performance. This calls for clear designation and assignment of roles within different levels and jurisdictions of government in a manner that is distinctive and clear-cut. The multiplicity of both exogenous and endogenous factors such as geographical, cultural and religious differences that are likely to affect the fiscal decentralization- County performance framework must be identified and assessed in order for County Governments to achieve their envisaged development objectives.

Yet another crucial contribution of this study is the identification of the key dependent indicators that define the state of welfare of communities since no development can be realized if interventions made by governments do not suitably and effectively target to affect changes to these factors. From extensive literature review, several indicators that stand out include the level of poverty, wellbeing ranking, expenditure per capita, human development index, absorption capacity and respective County contribution to overall national poverty (KNBS, Spatial Dimensions, 2016).

The extent of influence of the independent variables comprising equitable share, local revenue collection and other conditional/ unconditional grants explain the changes in the dependent variables. Therefore, the results of this research will offer crucial lessons for other scholars and researchers by introducing a multifaceted approach to the determinants of County governments performance in service delivery in Kenya.

6.4.2 Implications of the Study for Policy

Results from this study are valuable to a host of stakeholders such as the national governments, County governments, development partners, NGOs, civil society, private sector, researchers, scholars as well as the general public. The effects of fiscal decentralization have a crucial role in guiding and informing decisions on impact assessment for policy formulation on governance, efficiency in resource allocation, public participation and electoral accountability across all counties. Policy makers in sub-national governments normally focus on expenditure per capita, level of employment and proximity to basic infrastructure in order to influence the living standards of residents (World Bank, 2000). Hence, for County governments to achieve their objectives, there's a need for a framework that generates a sound basis for planning, budgeting, priority setting, evaluation, oversight and accountability that is transparent and predictable.

Results of this study will further make contributions to knowledge by offering crucial lessons that inform development professionals, decision makers, the donor community, private sector investors as well as NGOs who need well recorded data and information for their planning and policy formulation agenda for development. Players in the public sector are able to apply and deconstruct the concept of allocative efficiency into its various indicators in order to engage stakeholders in ways that lead to higher efficiencies and benefits in the use of available public resources.

Researchers are also able to disentangle and isolate specific variables of interest and commit them to more rigorous and in-depth examination to determine their roles/ relevance in the broader framework of national development. The evidence and findings from this study therefore forms a sound basis for SNGs to contextualize and align their capacities and institutions to strengthen local governance structures, making them more responsive, transparent and democratic for the benefit of citizens. Stakeholders and policy makers at the national level can find evidence gathered in this study that gives them a basis on which to improve their systems and structures as they pursue the goal of translating development activities into measurable outcomes that can be shared and disseminated to the wider public.

6.4.3 Implications of the Study for Practice

The results guide in the formulation of an apt mix of fiscal prescriptions to adopt in guiding expenditure and revenue mobilization to ensure equity and stability. Constitution of Kenya (2010) requires not less than 15% of revenue collected nationally to be transferred to the 47 County governments in addition to locally collected revenues. Further, the County governments are required to devolve the finances and responsibilities to the lowest units practicable.

To achieve allocative efficiency, the Constitution (2010) compels County governments to provide for the participation of residents in the governance and allocation of available funds to ensure only desired programs and priorities are implemented which are linked to expected benefits. The study offers additional insights and a better understanding of the impact of predictor variables and help avoid guesswork and ambiguity in financial planning strategies and prudent utilization of scarce resources. These findings will also add value in ensuring that SNGs focus on their specific mandates as well as the broader goals that must be aligned with the Vision 2030 and the Sustainable Development Goals (SDGs).

Finally, the study results have provided a pivotal contribution by applying analytical models that help predict outcomes of relationships amongst the four variables as compared to previous bi-variate models. This has helped to shed light on the controversy and lack of consensus and thus generalize the interplay of the various theoretical models prescribed in the study. In Kenya, the need to significantly reduce the amounts of public expenditure at all government levels and reduce vertical fiscal imbalance between National Government and County Government levels makes the issue of measuring performance of County Governments imperative. As well, examining the relationship between the performance of County Governments vis-a-vis exogenous factors, and identifying outcomes of inefficiency is of crucial interest to decision makers. The results from this study helps in making comparisons between the performance of County Governments in Kenya and those of other nations. However, caution must be exercised owing to the fact that various heterogeneity issues like inputs and output variables, analytical tools and methods employed can all make a difference.

6.5 Limitations of Study

This was an inductive study that covered the entire population of 47 County governments. The research used panel data for the period 2013/14 to 2017/18 financial years. The study used both cross sectional and time series design and used a data collection form to gather data from relevant government departments and other institutions that collect, analyze and store data and information for various reasons. Notwithstanding the enormous advantages of both cross-sectional and time series approach, a couple of limitations were faced. First, the study was faced with a dearth of literature on similar studies within the study context. The few conducted studies have mainly been reviews of literature while some scholars have embarked on studies on very few variables- mainly bivariate.

Another similar limitation is the attribution challenge. This arose due to inability to relate the outcome measurements of the various indicators with the specified inputs. Notably, existence of a huge number of private and other public players within the territorial context of counties impacted the broad environment of transforming inputs into outputs. This is further complicated by the existence of spill-over effects from various government activities. As noted by Musgrave (1959), lower level governments that play the role of administrative agents of the central command do not necessarily reflect the true expenditure and their subnational share of real autonomy in decision-making.

A further challenge is the dilemma of associating some variables with causality. As the study was on the existing relationships, it is possible that some of the key variables like allocative efficiency and public governance cause or are caused by others in ways that can form a basis for further research. It has also been recognized that a few critical variables to the conceptual framework may have been omitted, which could have influenced the results in certain ways. Public sector, unlike private industry visualizes its outcomes in a multi-dimensional manner, and some of the impact does not render itself to technical measurements. The researcher has however surmounted these challenges to produce study findings that are a reflection of great effort and zeal for completeness and objectivity.

6.6 Future Research Directions

This study considered the effects of fiscal decentralization, allocative efficiency, public governance and County Governments performance at a specific period when Kenya was undergoing transition from a centralized to a devolved system of governance. The study context was the whole population- 47 counties using cross-sectional and time series design. According to Daron and James (2013), any complex social, economic and political phenomenon such as governance results in different counties likely being affected by a variety of causes. This makes most business and economic researches ignore monocausal, simple and generally applicable propositions in favour of different explanations for similar outcomes emerging in different times and contexts. Given that the study fails to substantiate with finality the theoretically predicted contribution of fiscal decentralization to economic growth, this leads to a likely conclusion that the methods used may be inappropriate or some of the data collected may be faulty.

There is therefore need to consider this issue further in order to reveal problems that may explain the reasons and contradictions. Future research can be focused on determining the post-transition relationships among the key variables and other factors. Future studies should also focus on assessing the relationship of fiscal decentralization and County performance when different intervening and moderating variables are considered such as human capital, infrastructural development, social-cultural differences etc. This view is also true according to Garcia-Mila & McGuire (2002) who notes that populations in the counties have different tastes that relate differently with different parameters. The study finds that further work could be extended to other dimensions of fiscal decentralization which may include autonomy, expansion of local revenues, composition of expenditures, human resource establishments and requisite levels as well as ensuring observance of the hard budget constraints by County governments.

Similarly, future research can be undertaken as case studies of specific individual counties. This may be necessary given that counties are highly heterogeneous and straddle very different climatic and physical conditions and their geographical and population sizes are also highly different. In addition, future scholars may wish to establish the extent to which comparisons can be made of which sectors have been transformed most and which least under the reformed system of governance. This will guide in future resource allocations to ensure balanced progress. The current study focused on the effects of fiscal decentralization on the performance of County governments. Further studies could focus on developing a composite picture of economic activities especially in the context of a rapidly increasing access to available data and statistics to estimate the County-specific Gross Domestic Product using standard approaches of production figures, expenditures and incomes.

Other research directions could include using other methods of measuring the performance of County governments such as employments levels, access to universal health, literacy rates and indices that reflect a region's state of wellbeing accruing out of the various policies and expenditure decision applied (Kristina, 2005).

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APPENDICES

Appendix I: Data Collection Form

Data Collection Form (Source: Public Audit Act, CoK 2010, CGA, PFMA, PPDA, National Treasury)

Variable	Data/Indicators		2013/14	2014/15	2015/16	2016/17	2017/18
Fiscal Decentralization (FD)	▪ Total national tax revenue	XX					
	▪ Total transferable to counties	XX					
	▪ Equitable share for each county	XX					
	▪ County's targeted collection	XX					
	▪ County's actual collection	XX					
	▪ Conditional/unconditional grants	XX					
	▪ Equalization funds (grants)	XX					
Allocative Efficiency (AE)	▪ Effectiveness of public participation	XX					
	▪ Budget allocations Vs. Proposal priorities	XX					
	▪ Existence of public monitoring and evaluation	XX					
	▪ Extent of frequency of public engagements	XX					
	▪ Degree of responsiveness/actions of govt from public demands	XX					

	▪ Access to development plans, budget plans and oversight reports	XX					
	▪ Level of involvement of private sector, NGOs, CSOs, and professional bodies	XX					
	▪ Assessment of social and economic benefits from govt activities	XX					
	▪ Existence of open public input and feedback mechanisms	XX					
	▪ Public access to audit and implementation plans	XX					
	▪ Existence of forums and mechanisms for public consultation and exchanges	XX					
	Source: Adopted from ADB/AGO Measurement Indicators						
Public Governance (PG)	▪ Transparency and openness	XX					
	▪ Compliance with the laid down laws and regulations	XX					
	▪ Existence of operating manual, policies and procedures	XX					
	▪ Existence of budget oversight and scrutiny mechanisms	XX					
	▪ Public involvement in revenue raising measures	XX					
	▪ Effectiveness of tax administrative measures	XX					

	▪ Public awareness of liabilities (loans and creditors)	XX					
	▪ Adherence to expenditure control framework	XX					
	▪ Existence of a fair, transparent public procurement procedures	XX					
	▪ Scope of effectiveness of oversight activities and organs	XX					
	▪ Existence of sanctions and remedial measures for failure	XX					
	▪ Compliance with good practices and standards	XX					
	▪ Enforcement capacity of audits, oversight and regulatory bodies	XX					
	▪ Quarterly and annual reports from OAG, OCoB, EACC and TI.	XX					
	▪ Existence of capable and competent staff at senior levels of management	XX					
	▪ Existence of regulatory and enforcement agents at county level	XX					
	▪ Ability and frequency of enacting county legislation						
County Performance (CP)	▪ Actual development expenditure	XX					
	▪ Actual recurrent expenditure	XX					

	▪ Health status of residents	XX					
	▪ Education literacy levels	XX					
	▪ Expenditure per capita	XX					
	▪ Level of unemployment	XX					
	▪ Wellbeing/poverty levels	XX					
	▪ County's proportionate contribution to national poverty incidence	XX					

Appendix II: List of Counties in Kenya

1. Mombasa	17. Kwale	33. Kilifi
2. Tana river	18. Lamu	34. Taita / Taveta
3. Garissa	19. Wajir	35. Mandera
4. Marsabit	20. Isiolo	36. Meru
5. Tharaka-Nithi	21. Embu	37. Kakamega
6. Kitui	22. Machakos	38. Bungoma
7. Makueni	23. Nyandarua	39. Siaya
8. Nyeri	24. Kirinyaga	40. Homa Bay
9. Murang'a	25. Kiambu	41. Migori
10. Turkana	26. West Pokot	42. Busia
11. Samburu	27. Trans Nzoia	43. Kisumu
12. Uasin Gishu	28. Elgeyo/Marakwet	44. Vihiga
13. Nandi	29. Baringo	45. Kisii
14. Laikipia	30. Nakuru	46. Nyamira
15. Narok	31. Kajiado	47. Nairobi
16. Kericho	32. Bomet	

Source: Constitution of Kenya, 2010

Appendix III: Devolved Funds in Kenya

1. Bursary Fund – 1993 at Sub-county level
2. Local Authority Transfer Fund (LATF) – 1999 at Sub-unit levels
3. Constituencies Development Fund (CDF) – 2003 at Sub-county level
4. Free Primary Education (FPE) - 2003 at School level
5. Road Maintenance Fuel Levy (RMFL) – 2005 at Sub-county level
6. HIV/AIDS (CACCs) – 2005 at Sub-county level
7. Rural Electrification Fund – 2006 at Sub-county level
8. Youth Enterprise Development Fund (YEDF) – 2008 at Sub-county level
9. Free Secondary Education (FSE) - 2008 at School level
10. Women Enterprise Development Fund (WEDF) – 2009 at Constituency level
11. Uwezo Fund – 2013 at Sub-county level
12. Shareable Revenue – 2013 at County level
13. National Government Affirmative Action Fund – 2015 at County level

Source: Government of Kenya

Appendix IV: Cumulative per Person Payments to County Governments (Ksh)

No.	County	2013/14	2014/15	2015/16	2016/17	2017/18	Cumulative Payments (2013/14-2017/18)	Total Population	Payments Per Person (Annual Average)
	County	A	B	C	D	E	A+B+C+D+E		302,000
1	Lamu	1,509,775,102	1,802,318,513	2,172,952,802	2,509,540,339	2,651,822,899	10,646,409,655	548,107	8,116
2	Isiolo	2,247,835,837	2,682,961,881	3,199,678,723	3,537,827,614	3,977,382,371	15,645,686,426	721,873	6,453
3	Tharaka N	2,316,285,957	2,764,643,356	3,305,463,744	3,652,470,953	3,924,653,418	15,963,517,428	1,359,983	5,714
4	Taita Taveta	2,443,413,498	2,922,341,963	3,488,332,869	3,842,745,714	4,159,592,046	16,856,426,090	735,294	7,253
5	E/ Marakwet	2,473,729,097	2,894,583,377	3,471,543,872	3,823,933,460	3,874,344,959	16,538,134,765	366,115	8,907
6	Laikipia	2,557,539,642	3,037,429,843	3,651,034,608	4,104,689,637	4,849,806,234	18,200,499,964	508,047	7,899
7	Samburu	2,604,240,722	3,118,803,006	3,700,905,733	4,080,440,211	4,101,911,167	17,606,300,839	421,868	9,726
8	Kirinyaga	2,621,282,589	3,122,463,813	3,727,560,086	4,159,808,773	4,771,955,460	18,403,070,721	954,315	5,933
9	Vihiga	2,860,896,942	3,420,828,036	4,054,531,396	4,470,649,135	4,738,599,112	19,545,504,621	190,418	21,837
10	Tana River	2,921,556,211	3,495,601,069	4,137,496,801	4,627,810,651	5,609,335,303	20,791,800,035	675,955	6,723
11	Nyamira	3,081,787,287	3,684,498,196	4,358,048,612	4,831,602,226	5,014,612,763	20,970,549,084	1,644,328	5,580
12	Embu	3,100,540,129	3,571,958,959	4,205,121,593	4,777,935,686	4,739,146,006	20,394,702,373	737,942	6,082
13	Nyandarua	3,176,663,544	3,797,904,157	4,490,760,352	4,936,245,833	5,334,327,342	21,735,901,228	1,601,101	5,049
14	West Pokot	3,177,935,726	3,795,568,370	4,511,622,736	4,942,855,225	5,067,264,009	21,495,246,066	1,089,085	7,037
15	Kajiado	3,253,239,859	3,890,104,860	4,650,358,927	5,215,256,318	6,094,273,707	23,103,233,671	520,585	6,970
16	Baringo	3,281,383,323	3,926,106,431	4,656,934,428	5,233,961,425	5,445,546,608	22,543,932,215	1,139,552	6,383
17	Kericho	3,353,059,897	3,973,438,352	4,748,554,101	5,252,797,896	5,551,584,745	22,879,434,991	951,587	6,288
18	Busia	3,463,379,155	4,799,492,252	5,668,513,352	6,256,557,033	6,790,117,217	26,978,059,009	979,563	7,300
19	Bomet	3,473,870,878	4,162,524,827	4,909,906,160	5,408,349,433	5,604,674,724	23,559,326,022	641,118	8,428
20	Nandi	3,513,121,827	4,196,573,747	4,958,627,028	5,469,004,415	5,461,582,006	23,598,909,023	385,382	9,118
21	Nyeri	3,685,716,476	4,138,865,733	5,042,278,330	5,600,339,382	5,643,830,440	24,111,030,361	98,646	20,970
22	Siaya	3,717,804,335	4,436,323,009	5,246,071,112	5,797,489,075	5,977,911,640	25,175,599,171	1,084,129	6,378

23	Trans Nzoia	3,768,041,967	4,490,618,357	5,323,073,849	5,856,599,951	6,029,670,646	25,468,004,770	873,416	6,841
24	Kwale	3,788,132,670	4,531,614,262	5,405,264,065	5,986,544,213	7,677,172,706	27,388,727,916	927,605	8,575
25	Marsabit	3,805,077,542	4,554,700,287	5,363,688,014	5,861,348,668	6,917,098,140	26,501,912,651	288,272	18,204
26	Uasin Gishu	3,811,462,902	4,564,237,642	5,390,581,097	5,947,601,606	6,070,850,292	25,784,733,539	1,337,045	5,333
27	Narok	3,897,497,831	4,664,355,024	5,537,068,743	6,064,109,450	7,040,079,000	27,203,110,048	905,745	6,396
28	Murang'a	3,964,995,471	4,733,688,227	5,605,841,727	6,224,115,350	6,613,083,894	27,141,724,669	918,681	6;446
29	Homa Bay	4,182,101,595	4,991,175,873	5,911,122,678	6,516,573,708	6,987,739,413	28,588,713,267	935,286	5,759
30	Mombasa	4,291,377,471	4,805,790,006	5,856,541,422	6,460,495,121	8,862,419,593	30,276,623,613	3,068,835	4,198
31	Migori	4,339,034,161	5,178,050,161	6,179,702,331	6,742,468,649	6,891,937,645	29,331,192,947	1,562,625	5,380
32	Makueni	4,403,546,303	5,255,759,064	6,234,615,763	6,857,630,551	7,501,905,511	30,253,457,192	740,556	6,268
33	Garissa	4,437,683,790	5,190,150,287	6,351,245,243	6,971,228,790	7,414,178,799	30,364,486,909	838,624	6,394
34	Kisumu	4,615,876,577	5,262,002,848	6,324,406,000	6,994,542,675	7,264,586,909	30,461,415,009	591,491	7,011
35	Meru	5,006,846,175	5,811,720,035	8,068,730,716	8,695,004,808	8,585,775,308	36,168,077,042	582,436	7,291
36	Machakos	5,114,071,345	6,134,394,187	7,346,493,531	8,166,790,848	8,271,694,407	35,033,444,318	678,735	6,953
37	Wajir	5,311,159,775	6,355,760,549	7,470,850,704	8,159,999,887	8,612,138,493	35,909,909,408	220,978	15,724
38	Kitui	5,348,827,428	6,407,041,897	7,583,499,487	8,389,946,573	9,236,468,882	36,965,784,267	833,230	5,978
39	Kisii	5,487,250,383	6,361,766,497	7,772,145,310	8,664,058,165	8,488,124,729	36,773,345,084	274,662	11,843
40	Kilifi	5,518,308,482	6,574,938,022	7,842,163,405	8,563,981,588	10,545,840,122	39,045,231,619	238,372	17,321
41	Kiambu	5,980,601,386	6,707,156,605	8,207,917,647	9,264,204,773	10,823,182,396	40,983,062,807	359,717	8,739
42	Bungoma	6,271,462,047	6,783,170,481	8,029,195,903	8,876,380,198	9,325,850,288	39,286,058,917	808,257	6,221
43	Mandera	6,569,847,929	7,851,533,937	9,224,728,949	10,084,615,714	10,249,597,742	43,980,324,271	801,346	11,693
44	Nakuru	6,647,425,748	7,503,232,007	8,909,150,835	9,841,244,944	10,225,773,668	43,126,827,202	867,712	5,767
45	Kakamega	6,931,155,657	8,090,604,228	9,646,227,641	10,703,578,916	10,958,491,105	46,330,057,547	548,676	7,048
46	Turkana	7,674,315,857	9,178,804,658	10,748,014,432	11,709,814,817	10,699,869,917	50,010,819,681	522,830	10,850
47	Nairobi	9,729,818,320	11,441,036,548	13,534,170,793	14,946,783,245	16,219,361,723	65,871,170,629	485,464	8,385
	Grand Total	**195,664,976,833**	**231,058,635,439**	**276,222,737,642**	**305,015,973,635**	**326,897,165,498**	**1,334,859,489,047**		**6,915**

Source: National Treasury 2018

Appendix V: Cumulative Local Revenue Collections (Ksh Mn)

No.	COUNTY	FY 2013/14	FY 2014/15	FY 2015/16	FY 2016/17	FY 2017/18
1	Baringo	201.52	249.72	279.32	288.52	450
2	Bomet	200.95	206.39	166.99	236.7	228.48
3	Bungoma	182.70	504.62	630.99	661.59	731.9
4	Busia	328.99	315.20	334.22	256.83	612.16
5	E/Marakwet	61.00	128.91	128.06	97.32	160.29
6	Embu	168.49	401.11	396.53	416.27	839.78
7	Garissa	35.89	130.72	105.94	81.96	250
8	Homa Bay	134.99	157.86	183.77	144.14	209.46
9	Isiolo	125.06	133.70	110.11	94.99	182.86
10	Kajiado	453.37	785.84	650.98	557.09	990.79
11	Kakamega	325.22	516.89	504.24	443.18	952.57
12	Kericho	371.40	413.58	434.40	489.98	735.97
13	Kiambu	1,246.68	2,110.86	2,461.35	2,032.98	3,127.40
14	Kilifi	459.58	545.50	519.08	620.09	929.66
15	Kirinyaga	200.37	311.64	390.38	320.64	500
16	Kisii	250.15	296.77	306.13	271.64	850
17	Kisumu	621.86	970.90	978.89	1,004.04	1,395.26
18	Kitui	255.24	320.52	416.19	315.35	702.04
19	Kwale	208.45	253.97	248.62	221.01	833.37
20	Laikipia	347.12	400.48	471.15	462.72	700
21	Lamu	35.57	61.67	57.32	76.96	90
22	Machakos	1,175.23	1,356.56	1,121.68	1,259.30	1,557.79
23	Makueni	189.19	215.35	213.17	216.25	450
24	Mandera	90.07	87.73	88.23	55.84	231
25	Marsabit	46.03	99.11	111.94	128.73	130
26	Meru	343.81	539.24	548.29	552.67	801.78
27	Migori	238.63	355.11	339.37	290.82	450
28	Mombasa	1,716.05	2,492.60	2,943.52	3,166.24	3,500.00
29	Muranga	419.99	562.23	617.53	506.69	1,100.99
30	Nairobi	10,026.17	11,500.05	11,710.01	10,929.83	20,178.00
31	Nakuru	1,816.53	2,200.28	2,295.46	1,548.29	2,500.00
32	Nandi	130.54	298.04	236.90	244.74	419.78
33	Narok	1,538.56	1,639.21	1,752.94	1,533.93	4,014.37
34	Nyamira	94.03	104.25	106.98	93.92	272.46
35	Nyandarua	138.44	240.63	279.23	296.77	371
36	Nyeri	432.23	680.70	709.55	643.14	1,000.00
37	Samburu	201.00	195.72	166.84	187.66	301.23
38	Siaya	99.77	143.33	127.93	172.84	270
39	Taita Taveta	126.86	216.60	172.77	172.02	338.47
40	Tana River	31.56	33.03	28.41	27.42	60
41	Tharaka Nithi	85.37	115.73	139.13	78.57	179.92
42	Trans Nzoia	201.66	301.27	364.97	217.89	600
43	Turkana	132.88	126.52	134.02	186.32	200
44	Uasin Gishu	563.67	800.82	719.04	663.83	1,000.00
45	Vihiga	123.30	115.94	138.94	96.03	220
46	Wajir	61.03	107.74	81.78	75.91	200
47	West Pokot	58.89	103.90	98.31	83.22	105.32
	Total	**26,296.09**	**33,848.54**	**35,021.60**	**32,522.87**	**55,924.08**
	Source: The National Treasury and Office of the Controller of Budget					

Appendix VI: Conditional and Unconditional Grants (Ksh Mn)

No.	County	2013/14	2014/15	2015/16	2016/17	2017/18
1	Baringo	382.56	182.88	274.06	338.14	633.2
2	Bomet	272.58	150.77	245.82	258.04	507.54
9	Bungoma	334.60	711.42	598.65	453.23	830.71
4	Busia	266.37	661.13	322.18	301.82	563.41
5	E/Marakwet	744.50	139.36	230.3	276.48	424.19
6	Embu	557.20	612.27	520.76	518.72	749.03
7	Garissa	475.03	203.73	626.95	636.79	969.82
8	Homa Bay	1,604.79	215.46	345.65	352.91	658.74
9	Isiolo	187.89	91.80	177.82	198.35	505.24
10	Kajiado	284.38	214.15	307.21	389.5	510.52
11	Kakamega	840.70	1,162.03	1,083.92	917.92	1,227.61
12	Kericho	317.79	120.83	292.1	288.04	464.75
13	Kiambu	805.57	236.06	1,339.42	879.44	1,093.09
14	Kilifi	377.89	142.60	475.53	549.6	900.16
15	Kirinyaga	242.06	277.58	540.49	217.8	431.32
16	Kisii	635.95	239.26	768.98	817.59	1,143.79
17	Kisumu	711.38	459.04	717.48	719.54	961.75
18	Kitui	519.09	299.72	359.27	443.76	840.3
19	Kwale	280.45	168.48	339.83	404.48	694.69
20	Laikipia	234.82	155.22	448.86	290.03	498.22
21	Lamu	99.24	91.80	155.71	265.97	432.51
22	Machakos	523.08	459.90	815.5	716.87	1,033.39
23	Makueni	354.91	309.13	517.13	309.93	728.06
24	Mandera	230.31	91.80	308.15	364.87	815.81
25	Marsabit	272.86	91.80	213.23	256.05	668.84
26	Meru	758.42	1,648.32	798.54	2,416.57	4,928.99
27	Migori	490.97	216.49	443.77	535.19	746.9
28	Mombasa	545.82	341.33	745.13	720.25	867.05
29	Murang'a	404.43	334.01	391.37	296.52	603.2
30	Nairobi City	390.47	1,605.34	6,864.38	964.89	3,050.07
31	Nakuru	1,025.00	456.05	858.3	853.5	1,127.24
32	Nandi	408.95	120.80	259.06	269.99	555.83
33	Narok	278.79	205.42	295.08	363.82	655.98
34	Nyamira	278.44	153.90	266.33	270.34	519.2
35	Nyandarua	284.91	145.77	306.93	236.22	626.08
36	Nyeri	817.15	514.44	802.07	652.98	841.85
37	Samburu	206.94	91.80	179.93	212.26	596.6
38	Siaya	318.01	653.61	425.95	323.94	527.57
39	Taita/Taveta	205.85	91.80	218.6	238.34	488.7
40	Tana River	204.48	123.80	189.07	321.55	672.81
41	Tharaka -Nithi	139.76	698.82	505.59	236.85	497.56
42	Trans Nzoia	193.13	91.80	258.85	282.46	603.57
43	Turkana	230.00	91.80	304.57	400.86	936.43
44	Uasin Gishu	270.26	96.43	317.18	253.41	587.97
45	Vihiga	196.97	410.46	292.43	246.49	520.87
46	Wajir	357.47	91.80	289.8	343.45	801.28
47	West Pokot	437.78	96.43	231.73	292.77	638.61
	Total	**20,000.00**	**15,768.64**	**27,269.66**	**21,898.52**	**43,681.02**

Source: National Treasury and KNBS

Appendix VII: Estimated Minimum County Public Participation Engagements

No.	Counties	S/Counties	CIDP	CFSP	ADP	CBROP	CAA	CFA	Total Fre
1	Baringo	6	6	30	30	30	30	30	162
2	Bomet	5	5	25	25	25	25	25	135
3	Bungoma	9	9	45	45	45	45	45	243
4	Busia	7	7	35	35	35	35	35	189
5	E/Marakwet	4	4	20	20	20	20	20	108
6	Embu	4	4	20	20	20	20	20	108
7	Garissa	6	6	30	30	30	30	30	162
8	Homa Bay	8	8	40	40	40	40	40	216
9	Isiolo	2	2	10	10	10	10	10	54
10	Kajiado	5	5	25	25	25	25	25	135
11	Kakamega	12	12	60	60	60	60	60	324
12	Kericho	6	6	30	30	30	30	30	162
13	Kiambu	12	12	60	60	60	60	60	324
14	Kilifi	7	7	35	35	35	35	35	189
15	Kirinyaga	4	4	20	20	20	20	20	108
16	Kisii	9	9	45	45	45	45	45	243
17	Kisumu	7	7	35	35	35	35	35	189
18	Kitui	8	8	40	40	40	40	40	216
19	Kwale	4	4	20	20	20	20	20	108
20	Laikipia	3	3	15	15	15	15	15	81
21	Lamu	2	2	10	10	10	10	10	54
22	Machakos	8	8	40	40	40	40	40	216
23	Makueni	6	6	30	30	30	30	30	162
24	Mandera	6	6	30	30	30	30	30	162
25	Marsabit	4	4	20	20	20	20	20	108
26	Meru	9	9	45	45	45	45	45	243
27	Migori	8	8	40	40	40	40	40	216
28	Mombasa	6	6	30	30	30	30	30	162
29	Murang'a	7	7	35	35	35	35	35	189
30	Nairobi	17	17	85	85	85	85	85	459
31	Nakuru	11	11	55	55	55	55	55	297
32	Nandi	6	6	30	30	30	30	30	162
33	Narok	6	6	30	30	30	30	30	162
34	Nyamira	4	4	20	20	20	20	20	108
35	Nyandarua	5	5	25	25	25	25	25	135
36	Nyeri	6	6	30	30	30	30	30	162
37	Samburu	3	3	15	15	15	15	15	81
38	Siaya	3	3	15	15	15	15	15	81
39	Taita Taveta	4	4	20	20	20	20	20	108
40	Tana River	3	3	15	15	15	15	15	81
41	T/Nithi	3	3	15	15	15	15	15	81
42	Trans Nzoia	5	5	25	25	25	25	25	135
43	Turkana	7	7	35	35	35	35	35	189
44	Uasin Gishu	6	6	30	30	30	30	30	162
45	Vihiga	5	5	25	25	25	25	25	135
46	Wajir	8	8	40	40	40	40	40	216
47	West Pokot	4	4	20	20	20	20	20	108

Source: *Kenya Law Reports Commission, Commission on Administrative of Justice*

Appendix VIII: County Wellbeing Indices (Expected Benefits)

County	Wellbeing Index	County	Wellbeing index
Baringo	0.487	**Marsabit**	0.242
Bomet	0.487	**Meru**	0.690
Bungoma	0.527	**Migori**	0.504
Busia	0.396	**Mombasa**	0.652
E/Marakwet	0.473	**Murang'a**	0.668
Embu	0.647	**Nairobi**	0.782
Garissa	0.411	**Nakuru**	0.665
Homa Bay	0.516	**Nandi**	0.600
Isiolo	0.347	**Narok**	0.590
Kajiado	0.620	**Nyamira**	0.493
Kakamega	0.508	**Nyandarua**	0.612
Kericho	0.607	**Nyeri**	0.724
Kiambu	0.758	**Samburu**	0.286
Kilifi	0.416	**Siaya**	0.618
Kirinyaga	0.741	**T/Nithi**	0.590
Kisii	0.486	**Taita Taveta**	0.496
Kisumu	0.601	**Tana River**	0.244
Kitui	0.396	**Trans Nzoia**	0.588
Kwale	0.293	**Turkana**	0.125
Laikipia	0.521	**Uasin Gishu**	0.662
Lamu	0.677	**Vihiga**	0.611
Machakos	0.574	**Wajir**	0.158
Makueni	0.394	**West Pokot**	0.337
Mandera	0.142		

Source: KNBS 2016

Appendix IX: Statutory Legal and Regulatory Requirements

No.	Counties	CFSP	ADP	CBROP	CAA	CFA	Total Frequency
1	Baringo	5	5	5	5	5	25
2	Bomet	5	5	5	5	5	25
3	Bungoma	5	5	5	5	5	25
4	Busia	5	5	5	5	5	25
5	E/Marakwet	5	5	5	5	5	25
6	Embu	5	5	5	5	5	25
7	Garissa	5	5	5	5	5	25
8	Homa Bay	5	5	5	5	5	25
9	Isiolo	5	5	5	5	5	25
10	Kajiado	5	5	5	5	5	25
11	Kakamega	5	5	5	5	5	25
12	Kericho	5	5	5	5	5	25
13	Kiambu	5	5	5	5	4	24
14	Kilifi	5	5	5	5	5	25
15	Kirinyaga	5	5	5	5	5	25
16	Kisii	5	5	5	5	5	25
17	Kisumu	5	5	5	5	5	25
18	Kitui	5	5	5	5	4	24
19	Kwale	5	5	5	5	5	25
20	Laikipia	5	5	5	5	5	25
21	Lamu	5	5	5	5	5	25
22	Machakos	5	5	5	5	5	25
23	Makueni	5	5	5	5	5	25
24	Mandera	5	5	5	5	5	25
25	Marsabit	5	5	5	5	5	25
26	Meru	5	5	5	5	5	25
27	Migori	5	5	5	5	5	25
28	Mombasa	5	5	5	5	5	25
29	Murang'a	5	5	5	5	5	25
30	Nairobi	5	5	5	5	5	25
31	Nakuru	5	5	5	5	5	25
32	Nandi	5	5	5	5	5	25
33	Narok	5	5	5	5	5	25
34	Nyamira	5	5	5	5	5	25
35	Nyandarua	5	5	5	5	5	25
36	Nyeri	5	5	5	5	5	25
37	Samburu	5	5	5	5	5	25
38	Siaya	5	5	5	5	5	25
39	Taita Taveta	5	5	5	5	5	25
40	Tana River	5	5	5	5	4	24
41	T/Nithi	5	5	5	5	5	25
42	Trans Nzoia	5	5	5	5	5	25
43	Turkana	5	5	5	5	5	25
44	Uasin Gishu	5	5	5	5	5	25
45	Vihiga	5	5	5	5	5	25
46	Wajir	5	5	5	5	5	25
47	West Pokot	5	5	5	5	5	25

Source: Constitution of Kenya 2010

Appendix X: Absorption Rates of Development Expenditures

NO.	COUNTY	2013/14	2014/15	2015/16	2016/17	2017/18	AVERAGE
1	Baringo	30.70%	59.50%	53.90%	56.20%	93.30%	58.72%
2	Bomet	92.40%	99.60%	94.60%	89.60%	89.20%	93.08%
3	Bungoma	15.30%	46.70%	76.10%	48.70%	84.00%	54.16%
4	Busia	17.60%	68.70%	69.00%	63.90%	84.70%	60.78%
5	E/Marakwet	49.90%	75.50%	45.60%	63.00%	84.40%	63.68%
6	Embu	12.20%	39.50%	40.10%	81.40%	100.30%	54.70%
7	Garissa	31.00%	72.40%	78.80%	87.00%	96.30%	73.10%
8	Homa Bay	64.40%	101.20%	79.10%	75.90%	84.90%	81.10%
9	Isiolo	51.00%	82.20%	76.80%	90.40%	85.10%	77.10%
10	Kajiado	46.00%	50.20%	56.80%	3.81%	73.40%	46.04%
11	Kakamega	27.70%	60.60%	72.40%	82.40%	97.30%	68.08%
12	Kericho	54.00%	73.80%	78.10%	82.70%	88.00%	75.32%
13	Kiambu	41.10%	66.70%	71.40%	69.90%	82.90%	66.40%
14	Kilifi	20.70%	64.90%	62.60%	65.50%	88.00%	60.34%
15	Kirinyaga	34.00%	57.60%	70.50%	57.60%	99.50%	63.84%
16	Kisii	55.00%	79.90%	70.60%	54.30%	100.60%	72.08%
17	Kisumu	4.00%	47.40%	45.30%	62.60%	65.90%	45.04%
18	Kitui	56.50%	58.30%	69.60%	70.70%	95.10%	70.04%
19	Kwale	56.90%	55.80%	68.40%	56.80%	102.40%	68.06%
20	Laikipia	34.00%	53.90%	60.70%	62.70%	95.40%	61.34%
21	Lamu	24.00%	50.80%	64.40%	38.30%	81.00%	51.70%
22	Machakos	64.50%	27.90%	44.60%	99.10%	66.10%	60.44%
23	Makueni	30.70%	37.30%	31.70%	73.40%	69.70%	48.56%
24	Mandera	23.70%	88.30%	74.80%	80.60%	106.70%	74.82%
25	Marsabit	34.60%	63.80%	72.70%	86.90%	95.30%	70.66%
26	Meru	19.70%	67.50%	58.80%	69.60%	50.30%	53.18%
27	Migori	61.00%	65.40%	66.70%	62.80%	79.50%	67.08%
28	Mombasa	2.40%	65.70%	82.40%	68.80%	100.50%	63.96%
29	Murang'a	51.30%	75.30%	81.10%	58.10%	101.90%	73.54%
30	Nairobi	25.00%	33.50%	52.90%	33.40%	178.50%	64.66%
31	Nakuru	16.50%	43.20%	41.40%	35.10%	105.40%	48.32%
32	Nandi	44.40%	99.90%	77.30%	71.40%	72.80%	73.16%
33	Narok	22.00%	78.50%	77.60%	63.30%	99.90%	68.26%
34	Nyamira	44.00%	65.20%	54.50%	58.60%	62.30%	56.92%
35	Nyandarua	55.00%	70.50%	77.80%	84.40%	86.20%	74.78%
36	Nyeri	64.00%	68.20%	62.50%	53.00%	57.50%	61.04%
37	Samburu	59.50%	78.20%	65.10%	86.40%	94.30%	76.70%
38	Siaya	29.00%	60.00%	57.00%	62.90%	65.00%	54.78%
39	T/Nithi	54.00%	45.80%	51.40%	42.90%	116.10%	62.04%
40	Taita Taveta	48.00%	71.80%	41.10%	28.60%	36.80%	45.26%
41	Tana River	3.00%	38.40%	80.40%	75.50%	100.00%	59.46%
42	Trans Nzoia	74.00%	53.50%	61.50%	64.60%	89.70%	68.66%
43	Turkana	48.00%	58.90%	66.30%	69.40%	97.40%	68.00%
44	Uasin Gishu	13.00%	69.30%	75.20%	54.60%	100.60%	62.54%
45	Vihiga	32.00%	57.20%	59.10%	52.50%	76.60%	55.48%
46	Wajir	78.20%	89.30%	85.10%	90.10%	86.20%	85.78%
47	West Pokot	60.00%	91.80%	79.50%	85.50%	84.80%	80.32%

Source: Controller of Budget

Appendix XI: Proportion of Actual Local Revenue Collection vs County Target

NO.	COUNTY	2013/14	2014/15	2015/16	2016/17	2017/18	AVERAGE
1	Baringo	77.51%	97.62%	93.11%	87.43%	86.12%	88.36%
2	Bomet	85.17%	86.34%	88.43%	86.16%	90.59%	87.34%
3	Bungoma	6.63%	46.94%	78.48%	90.39%	75.88%	59.66%
4	Busia	89.81%	97.00%	61.54%	48.65%	42.77%	67.96%
5	E/Marakwet	71.77%	97.64%	43.36%	60.82%	65.81%	67.88%
6	Embu	25.56%	53.62%	62.86%	51.79%	63.68%	51.50%
7	Garissa	23.84%	18.67%	21.19%	23.42%	34.68%	24.36%
8	Homa Bay	95.95%	102.72%	90.64%	75.00%	90.12%	90.89%
9	Isiolo	34.74%	29.53%	30.59%	38.00%	62.65%	39.10%
10	Kajiado	87.69%	81.94%	52.83%	44.63%	65.54%	66.53%
11	Kakamega	11.56%	57.21%	50.42%	49.57%	56.88%	45.13%
12	Kericho	109.66%	107.86%	98.73%	81.21%	74.65%	94.42%
13	Kiambu	40.76%	64.69%	74.40%	66.22%	52.48%	59.71%
14	Kilifi	62.46%	54.55%	36.88%	39.10%	56.29%	49.86%
15	Kirinyaga	45.75%	73.77%	78.08%	43.14%	57.33%	59.61%
16	Kisii	34.30%	47.11%	43.73%	37.47%	26.98%	37.92%
17	Kisumu	35.75%	64.73%	52.39%	63.35%	76.17%	58.47%
18	Kitui	35.76%	49.31%	68.43%	47.16%	57.86%	51.70%
19	Kwale	32.45%	50.79%	82.87%	84.66%	100.47%	70.25%
20	Laikipia	62.30%	100.12%	94.23%	69.06%	82.67%	81.68%
21	Lamu	41.30%	93.81%	53.57%	76.96%	61.43%	65.41%
22	Machakos	46.24%	47.60%	47.30%	44.01%	66.72%	50.37%
23	Makueni	54.05%	93.63%	53.29%	65.53%	53.21%	63.94%
24	Mandera	20.59%	34.91%	44.29%	21.02%	26.76%	29.51%
25	Marsabit	104.62%	204.77%	86.11%	107.28%	64.15%	113.38%
26	Meru	52.25%	91.70%	92.11%	71.47%	53.75%	72.26%
27	Migori	30.00%	71.02%	84.84%	69.24%	111.13%	73.25%
28	Mombasa	33.82%	48.67%	72.65%	59.86%	87.86%	60.57%
29	Murang'a	52.50%	70.28%	72.65%	51.00%	53.38%	59.96%
30	Nairobi	64.90%	86.31%	76.59%	55.86%	58.68%	68.47%
31	Nakuru	59.04%	79.84%	99.27%	59.61%	91.15%	77.78%
32	Nandi	30.90%	65.35%	66.19%	67.55%	51.34%	56.27%
33	Narok	41.59%	48.70%	74.78%	53.05%	88.12%	61.25%
34	Nyamira	94.03%	47.59%	44.40%	47.38%	38.17%	54.31%
35	Nyandarua	79.56%	120.31%	71.23%	76.09%	85.87%	86.61%
36	Nyeri	90.23%	50.65%	65.58%	58.73%	76.02%	68.24%
37	Samburu	89.91%	48.14%	46.79%	54.26%	85.41%	64.90%
38	Siaya	65.21%	47.53%	37.26%	64.01%	51.61%	53.13%
39	T/Nithi	101.63%	46.29%	56.09%	39.27%	70.37%	62.73%
40	Taita Taveta	51.97%	41.51%	48.97%	48.38%	48.59%	47.88%
41	Tana River	36.15%	27.53%	23.67%	45.70%	188.75%	64.36%
42	Trans Nzoia	40.21%	78.25%	93.82%	43.58%	61.52%	63.47%
43	Turkana	53.15%	115.02%	67.01%	103.51%	71.95%	82.13%
44	Uasin Gishu	68.62%	89.98%	69.32%	55.69%	96.38%	76.00%
45	Vihiga	60.36%	30.69%	39.45%	43.65%	65.24%	47.88%
46	Wajir	51.27%	102.48%	54.52%	32.99%	45.07%	57.27%
47	West Pokot	154.97%	108.01%	55.44%	68.07%	79.47%	93.19%
	AVERAGE	**58.27%**	**71.76%**	**63.84%**	**58.96%**	**69.18%**	**64.40%**

Source: *National Treasury*

Appendix XII: County Governments Enacted Legislations

No.	County	2013	2014	2015	2016	2017	2018	Total
1	Machakos	3	11	11	9	2	2	38
2	Embu	3	3	13	8	4	3	34
3	Tana River	3	3	3	12	9	2	32
4	Nyeri	3	6	9	5	6	2	31
5	Kisii	2	6	12	5	2	2	29
6	Busia	2	6	4	6	8	2	28
7	Kericho	3	11	4	4	2	2	26
8	Laikipia	2	13	3	2	2	2	24
9	Nairobi	4	6	8	2	2	2	24
10	Nakuru	3	5	2	9	3	2	24
11	Elgeyo Marakwet	3	7	4	4	2	3	23
12	Mandera	3	12	2	2	2	2	23
13	Marsabit	2	2	4	10	3	2	23
14	Mombasa	2	5	2	10	2	2	23
15	Meru	3	9	3	3	2	2	22
16	Bomet	3	9	3	2	2	2	21
17	U. Gishu	3	5	3	5	3	2	21
18	West Pokot	2	3	9	3	2	2	21
19	Kakamega	3	6	3	2	4	2	20
20	Kitui	3	6	3	3	2	2	19
21	Nyandarua	3	4	3	4	3	2	19
22	Baringo	2	7	3	2	2	2	18
23	Kisumu	3	2	7	2	2	2	18
24	Migori	2	4	2	6	2	2	18
25	Nyamira	3	4	2	4	3	2	18
26	Turkana	2	4	4	4	2	2	18
27	Kiambu	3	3	3	4	2	2	17
28	Samburu	2	3	6	2	2	2	17
29	Makueni	2	2	4	4	2	2	16
30	Nandi	2	5	3	2	2	2	16
31	Vihiga	3	5	2	2	2	2	16
32	Wajir	2	4	3	3	2	2	16
33	Garissa	2	3	3	2	3	2	15
34	Homa Bay	3	2	3	2	3	2	15
35	Isiolo	3	2	3	2	3	2	15
36	Kajiado	2	2	2	5	2	2	15
37	Kilifi	2	3	4	2	2	2	15
38	Muranga	2	4	3	2	2	2	15
39	Siaya	3	4	2	2	2	2	15
40	T. Nzoia	3	3	3	2	2	2	15
41	Kirinyaga	3	2	3	2	2	2	14
42	Narok	2	3	3	2	2	2	14
43	Taita Taveta	2	3	2	2	2	2	13
44	Bungoma	2	2	2	2	2	2	12
45	Kwale	2	2	2	2	2	2	12
46	Lamu	2	2	2	2	2	2	12
47	T. Nithi	2	2	2	2	2	2	12

Source: Kenya Law Reports