### EFFECT OF BUDGETARY COMPLIANCE ON PERFORMANCE

### OF COUNTY GOVERNMENTS IN KENYA

**OKELLO ERICK ODHIAMBO** 

# A RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF MASTER OF SCIENCE IN FINANCE, FACULTY OF BUSINESS AND MANAGEMENT SCIENCES, UNIVERSITY OF NAIROBI

OCTOBER, 2022

#### DECLARATION

I, the undersigned, declare that this is my original work and has not been presented to any institution or university other than the University of Nairobi for examination.

(Enterto. Signed:

Date: 16/11/2022

OKELLO ERICK ODHIAMBO D63/36502/2020

This research project has been submitted for examination with my approval as the University Supervisor.

Date: 16.11.2022 Signed:

**DR. KENNEDY OKIRO** 

**Department of Finance and Accounting** 

Faculty of Business and Management Sciences, University of Nairobi

#### ACKNOWLEDGEMENT

This research is a compilation of a meaningful journey characterized by eye opening experiences and discoveries. First and foremost, I wish to thank God Almighty for continued grace and favor that sustained me through my entire academic journey. Secondly, I would wish to sincerely thank my supervisor Dr. Kennedy Okiro for his guidance and direction to complete the project. I appreciate his scholarly effort in enabling me come up with an acceptable quality work. His dedication is not only good for my study but also helpful to my future life and career. I am also very grateful to my family for prayers and unlimited support throughout the journey. Thank you for believing in me and the unconditional Love.

## **DEDICATION**

I wish to dedicate this work to my parents Milka Andrew and John Okelo. I value the insight and guidance you provided.

# TABLE OF CONTENTS

| DECLARATIONii                                    |
|--|
| ACKNOWLEDGEMENTiii                               |
| DEDICATIONiv                                     |
| LIST OF TABLES viii                              |
| LIST OF ABBREVIATIONSix                          |
| ABSTRACTx  |
| CHAPTER ONE: INTRODUCTION1                       |
| 1.1 Background of the Study1                     |
| 1.1.1 Budgetary Compliance2                      |
| 1.1.2 Performance of Counties                    |
| 1.1.3 Budgetary Compliance and Performance5      |
| 1.1.4 County governments in Kenya6               |
| 1.2 Research Problem7                            |
| 1.3 Research Objective9                          |
| 1.4 Value of the Study10                         |
| CHAPTER TWO: LITERATURE REVIEW11                 |
| 2.1 Introduction                                 |
| 2.2 Theoretical Framework                        |
| 2.2.1 Agency Theory11                            |
| 2.2.2 Modern Theory of Fiscal Decentralization12 |
| 2.2.3 Attribution Theory14                       |
| 2.3 Determinants of County Performance15         |
| 2.3.1 Budgetary Compliance15                     |
| 2.3.2 Revenue Transfer                           |
| 2.3.3 Local Revenue Collection16                 |
| 2.3.4 Recurrent Spending17                       |

| 2.4 Empirical Review   |  |
|--|--|
| 2.4.1 Global Studies   |  |
| 2.4.2 Local Studies  | 20   |
| 2.5 Summary of the Literature Review and Research Gaps   |  |
| 2.6 Conceptual Framework   |  |
| CHAPTER THREE: RESEARCH METHODOLOGY  | 24   |
| 3.1 Introduction   |  |
| 3.2 Research Design  | 24   |
| 3.3 Population   |  |
| 3.4 Data Collection  |  |
| 3.5 Diagnostic Tests   |  |
| 3.6 Data Analysis  |  |
| 3.6.1 Analytical Model   |  |
| 3.6.2 Tests of Significance  | 27   |
| CHAPTER FOUR: DATA ANALYSIS RESULTS AND FINDINGS   |  |
|  |  |
| 4.1 Introduction   |  |
| <ul><li>4.1 Introduction</li><li>4.2 Descriptive Statistics</li></ul>  |  |
|  |  |
| 4.2 Descriptive Statistics   | 28<br>28<br>29                                     |
| <ul><li>4.2 Descriptive Statistics</li><li>4.3 Diagnostic Tests</li></ul>  | 28<br>28<br>29<br>29                               |
| <ul> <li>4.2 Descriptive Statistics</li> <li>4.3 Diagnostic Tests</li> <li>4.3.1 Normality Test</li> </ul>                                       | 28<br>28<br>29<br>29<br>29<br>                     |
| <ul> <li>4.2 Descriptive Statistics</li> <li>4.3 Diagnostic Tests</li> <li>4.3.1 Normality Test</li> <li>4.3.2 Multicollinearity Test</li> </ul> | 28<br>28<br>29<br>29<br>30<br>30                   |
| <ul> <li>4.2 Descriptive Statistics</li></ul>  | 28<br>28<br>29<br>29<br>30<br>30<br>31             |
| <ul> <li>4.2 Descriptive Statistics</li></ul>  | 28<br>28<br>29<br>29<br>30<br>30<br>31<br>32       |
| <ul> <li>4.2 Descriptive Statistics</li></ul>  | 28<br>28<br>29<br>29<br>30<br>30<br>31<br>32<br>32 |
| <ul> <li>4.2 Descriptive Statistics</li></ul>  | 28<br>29<br>29<br>30<br>30<br>31<br>32<br>32<br>33 |

| CHAPTER FIVE: SUMMARY, CONCLUSION AND REC   | OMMENDATIONS |
|---|--------------|
|   |              |
| 5.1 Introduction                            |              |
| 5.2 Summary                                 |              |
| 5.3 Conclusions                             |              |
| 5.4 Recommendations for Policy and Practice |              |
| 5.5 Limitations of the Study                | 41           |
| 5.6 Suggestions for Further Research        |              |
| REFERENCES                                  | 44           |
| APPENDICES                                  | 51           |
| Appendix I: County Governments in Kenya     | 51           |
| Appendix II: Data Collection Schedule       |              |
| Appendix III: Research Data                 | 53           |

# LIST OF TABLES

| Table 3.1: Diagnostic Tests             | 25 |
|---|----|
| Table 4.1: Descriptive Results          | 28 |
| Table 4.2: Test for Normality           | 29 |
| Table 4.3: Multicollinearity            | 30 |
| Table 4.4: Heteroskedasticity Results   | 30 |
| Table 4.5: Test of Autocorrelation      | 31 |
| Table 4.6: Levin-Lin Chu unit-root test | 32 |
| Table 4.7: Hausman Test Results         | 33 |
| Table 4.8: Correlation Results          | 33 |
| Table 4.9: Regression Results           | 34 |
|   |    |

# LIST OF ABBREVIATIONS

| AGBIRR | Annual Government Budget Implementation Review Reports |  |  |  |
|--------|--|--|--|--|
| ANOVA  | Analysis of Variance                                   |  |  |  |
| СОВ    | Controller of Budget                                   |  |  |  |
| СоК    | Constitution of Kenya                                  |  |  |  |
| GDP    | Gross Domestic Product                                 |  |  |  |
| KNBS   | Kenya National Bureau of Statistics                    |  |  |  |
| OLS    | Ordinary Least Square                                  |  |  |  |
| PFM    | Public Finance Management                              |  |  |  |
| SME    | Small and Medium Enterprises                           |  |  |  |
| SPSS   | Statistical Package for Social Sciences                |  |  |  |
| VIF    | Variance Inflation Factors                             |  |  |  |

#### ABSTRACT

Research on the interactions between budgetary compliance and economic performance has turned inconclusive results on the actual interplay of the variables. Generally budgetary compliance is used as a financial performance measure in government institutions but particularly it is not the only determinant of performance as other factors also account to the overall achievement of its goals. The excellent performance of an organization can be realized starting from mounting of clear objectives, accounting of true financial performance and evaluation of performance based on consistency of the budget with the set goals. The main intention of this research was to examine budgetary compliance influence on performance of county governments in Kenya. Agency theory, modern decentralization theory and attribution theory were adopted to anchor the study. A descriptive research design was used in this research. The target population was the 47 county governments in Kenya. Secondary data was obtained from the Office of the Auditor General and individual county governments annual reports for a 5 year period (2017 to 2021). Upon collection of the data, inferential as well as descriptive statistics generated included frequencies and percentages and simple and multiple linear regression respectively. The regression results produced an R square of 0.2472 which implies that 24.72% of the changes in performance among county governments in Kenya can be explained by the four selected variables for this study. The overall model was found to be statistically significant as exhibited by a p value of 0.000 which was less than 0.05. The study further revealed that revenue transfer and local revenue collection had a positive and significant effect on performance of county governments in Kenya. Budgetary compliance and recurrent spending had no significant effect on performance. This study concluded that revenue transfer and local revenue collection are essential for county governments' performance. The study recommends that policy makers such as members of parliament should come up with policies that increase revenue transfer to the counties as this will lead to an increase in performance of devolved units. County heads should also advocate for an increase in revenues allocated to the counties. The study further recommends that heads of devolved units should develop strategies aimed at increasing local revenue collection without hurting the businesses as an increase in local revenue leads to a rise in performance. Members of the county assembly should also develop policies aimed at increasing the local revenue tax base.

#### **CHAPTER ONE: INTRODUCTION**

#### 1.1 Background of the Study

The debate on performance of counties is fundamental given its potential in influencing rapid economic growth and social development of the entire economy. Despite the significant efforts made to promote the devolved system of governance by empowering counties in developing countries, the expected impact on performance has not been realized (Mutungi, 2017). A study by Ocharo (2019) focusing on budget execution and performance of counties concluded that the main impediments to performance of counties is lack of budgetary compliance. Mathenge, Shavulimo and Kiama (2017) discovered that budget compliance encountered myriads of problems which are not limited to inadequate funds, unsatisfactory methods of budget allocation and executing projects that have not been planned for and not included in the overall budget.

This study was anchored on agency theory and supported by modern decentralization theory and attribution theory. Agency theory by Jensen and Meckling (1976) describes the connection between agents and principals. It is about addressing issues that may occur in agency interactions between principals (the government) and principal's agent (the accounting officers). Oates (1972) modern decentralization theory holds that some goods as well as services are distinctively suited for some precise areas and not others. This is because of diversity in tastes, preferences as well as natural endowments leading to efficiency in allocation of resources (Hallwood & MacDonald, 2010). Schroth and Shah's (2000) attribution theory focuses on the function of auditors in internal control environments. The auditors will get greater understanding of internal controls, analyze the design and conduct of internal controls, and evaluate internal controls' operating efficiency.

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, on budgetary compliance and performance 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 Budgetary Compliance**

Budgetary compliance refers to the establishment of budgets relating to the responsibilities of the executives of a policy and the continuous comparison of the actual with the budgeted results, aimed at securing the objective of the policy or to provide a basis for revision (Olaoye & Ogunmakin, 2014). According to Igbinosun and Ohiokha (2012), budgetary compliance entails the process of establishing what is happening and comparing the actual results with budgeted targets to ascertain achievement or remedy any variances that may have arisen. Swaine (2017) define budgetary compliance as the establishment of budgets relating to the responsibilities of executives and the continuous comparison of actual with the budgeted results, either to secure by individual actions the objectives of that policy or to provide a basis for its revision.

It is traditional for most organizations to establish a budget at the beginning of each period that guide towards meeting the objectives of the organization within the specified predetermined estimate that depends on the management of the organization (Bashuna, 2013). The scope of the budget will determine the level of operations to be carried out and proper budgetary compliance will aid in decision making as it tracks the level of performance of every activity and then identifying underperformed activities that may require revision or possible elimination (Mohamed, Evans & Tirimba, 2015). In order to keep in line with the objectives of the organization, every function within the organization must meet its stated budget and thus ultimately making it possible for the objectives of the organization to be achieved. Budgetary compliance is therefore important as it makes this possible through coordinating and monitoring of the various functions (Abdullahi, Abubakar, Kuwata & Muhammad, 2015).

Several ratios are utilized in measuring budgetary compliance. The most common metric for budgetary compliance is the difference between actual expenditure and budgeted expenditure (Batra & Verma, 2017). Another widely used measure of absorption rate among county governments is the ratio of final actual spending to final approved budget (Polisetty, 2016). A higher ratio would mean a corporation is spending more than budgeted and therefore control measures need to be taken. The current study utilized the ratio of final actual spending to final approved budget as it shows the extent to which the actual spending varies from the budget.

#### **1.1.2 Performance of Counties**

According to Ocharo (2019), performance is the attainment of set objectives and moderated against the current degree of comprehensiveness, momentum, cost and accuracy. County governments' performance refers to the extent to which the county governments in Kenya discharges and implements their mandates and functions as spelt in the Constitution (2010) for the benefits of the electorates. 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.

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.

According to Akorsu (2015), 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). The performance of the Kenyan Counties was measured by Gross County Product by Ocharo (2019) and this was the measure adopted in the current study.

#### **1.1.3 Budgetary Compliance and Performance**

When a budget is used effectively and a lot of control and accountability mechanism are put in place it influences the performance of management better by known results, forecasting the budget and are related to the analysis of financial performance trends (MelekEker, 2007). According to Adongo and Jagongo (2013), when a budget is well planned and executed professionally it will help improve and promote the socialeconomic well-being and the growth of economics and its people. A poorly formulated budget is often impossible to execute, while a poor budget execution strategy renders even the best of budgets impotent.

The central government's influence over public spending is weakened by devolving financial authority to lower government levels. It entails delegating authority to local governments so that they can make their own judgments about revenue collection tactics and expenditures. Local accountability, such as cost recovery through user charges and property taxes, comes with such authority (Stanton, 2009). Locally elected officials may get the ability to collect and spend their own revenue as a result of fiscal decentralization. Local governments are given considerable taxing rights and the freedom to select the scope of public service delivery in the most extreme form of fiscal decentralization (Grindle, 2007). Minorities are given a stake in the system by spreading authority and responsibility for budgetary management and public service delivery, which aids in conflict resolution (Ndung'u, 2014).

Budgetary compliance is intensely entrenched in the political economy argument that budgetary compliance results in better service delivery and performance (Aslam & Yilmaz, 2011). However, despite these theoretical underpinnings advocating for decentralization governance, findings on the impact of budgetary compliance on performance is mixed and inconclusive. Budgetary compliance improves performance, according to one branch of the literature (Balunywa et al., 2014; Freinkman & Plekhanov, 2009). Other research, on the other hand, revealed that budgetary compliance had a negative impact on performance (Elhiraika, 2007; Olatona & Olomola, 2015).

#### **1.1.4 County governments in Kenya**

In the year 2010, Kenya charted the path of decentralization through constitutional reforms introducing greater fiscal powers to counties and urban authorities. Mwenda (2010) noted 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 (CoK, 2010). 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 grass root 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.

Corruption, waste, and unequal distribution of resources were the key drivers of demand for devolution in Kenya, which was a prescription for political instability (Ndii, 2010). Revenue transfer is supposed to achieve resource sharing equity and is known to have a positive impact on governance and government quality (Huther &

Shah, 1998). Muoria (2011) noted that budgetary compliance 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).

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 funds are distributed among all counties based on a set of criteria that includes population size, land area, and poverty levels. Conversely, county governments raise funds from local sources to augment transfers from the federal government. This is done through local tax collection in the form of property rates, charges and various fees. Intergovernmental transfers of grants as well as other conditional money to carry out nationally defined programs and projects within the counties were also sustained by the national government (Ocharo, 2019). For this transferred funds to achieve their intended objective, budgetary compliance is expected to play a significant role (Mbau, Iraya, Mwangi & Njihia, 2019).

#### **1.2 Research Problem**

Studies about possible link or interactions between budgetary compliance and economic performance have turned inconclusive results on the actual interplay of the variables. Generally budgetary compliance is used as a financial performance measure in government institutions but particularly it is not the only determinant of performance as other factors also account to the overall achievement of its goals (Adongo & Jagongo, 2013). The excellent performance of an organization can be realized starting from mounting of clear objectives, accounting of true financial performance and evaluation of performance based on consistency of the budget with the set goals (Kamau, Wambua & Mwangulu, 2014).

Every annual Auditor General's and Controller of Budget's Report since the beginning of devolved systems of government in 2013 has indicated that some county governments spend more than funds allocated by the national government and County Revenue collection in complete disregard of the PFM Act of 2012, resulting in counties incurring pending bills. Further, data from World Bank (2020) shows poor performance in county governments that adversely affects the economic growth of Kenya economy. Cash transfer from the national government through treasury to the counties has been faced by great problems such as misuse and wastage of limited resources. In many circumstances, supplementary budget money has been siphoned fraudulently. The misappropriation of public funds has been enabled by a lack of effective accounting systems and poor controls at the county level, which has slowed service delivery and overall performance of the devolved entities.

Several investigations have been done in this area internationally. Koriatmaja and Surasni (2020) concentrated on budget impact on procurement, execution of budget, among others in West Nusa Tenggara Province, Indonesia. The research found out that budget execution has no positive significant impact on the budget absorption. The study presents a conceptual gap as it did not relate budgetary compliance with county performance. Erlina, Arisaptra and Iskandar (2017) analyzed three independent variables ranging from budgeting time, budget surplus and local owned-source revenue and concluded that they have significant effect on the budget absorption. The research focused on the municipal government in the North Sumatera Province. However, the research did not focus on budgetary compliance in the relation with the performance. Although these studies are related to the current study, they are conducted in a different context and therefore their findings cannot be generalized in the current context.

Locally, Kipkirui (2020) sought to establish effect of budget absorption on the performance of county governments in Kenya. The results revealed that budget absorption ensures efficiency and effectiveness to the limited allocated resources with the aim of efficiently optimizing financial realization performance targets. The study focused on the allocated budget and not the compliance. Ocharo (2019) focused on budget execution and performance of county governments and concluded that budget execution has positive significant correlation with performance of the Kenyan counties. Rotich and Ngahu (2015) researched on the factors influencing and determining budget utilization in Kericho County. The study revealed that the skyscraping refund of allocated cash back to treasury under control of national government, implies poor implementation and utilization of budget. The study presents a methodological gap as it was a case study. Although prior research in this area has been done, there exist conceptual, contextual and methodological gaps. This study sought to contribute to fill these research gaps by responding to the research question: What is the influence of budgetary compliance on performance of county governments in Kenya?

#### **1.3 Research Objective**

The study's objective was to assess the effect of budgetary compliance on performance of county governments in Kenya.

#### **1.4 Value of the Study**

The conclusions of this research will contribute to already existing theoretical as well as empirical literature on budgetary compliance and performance. The findings will also help in theory development as they will offer insights on the shortcomings and relevance of the current theories to the variables of the study. Subsequent studies may also be carried out based on the recommendation for further research.

The conclusions of the research might be relevant to the policy makers such as the government. The research will serve as government guide on its role in policy making and how budgetary compliance influences performance of devolved units. This would help the government identify areas of improvement. It will also help in evaluating how the various county governments are doing in terms of budgetary compliance and develop relevant policies.

The conclusions will also aid county government management in understanding the correlation between the two variables; the research will give them insight on the significance of budgetary compliance. Managers are likely to develop a clear strategy for improving their budgetary compliance. The information can be used by the firms to enhance their delivery mode as well as strengthen their position.

#### **CHAPTER TWO: LITERATURE REVIEW**

#### **2.1 Introduction**

This chapter's main aim is to go through theories that are basis of the study. More so, the chapter discusses the prior empirical studies done pertaining to the research topic and areas related to it. Additionally, the chapter contains other sections which elaborates on the determinants of performance, shows the conceptual framework which illuminate on the study variable relationships, study gap and finally a summary of literature.

#### **2.2 Theoretical Framework**

This section summarizes key theories explaining the link between budgetary compliance and performance. Agency theory, modern theory of fiscal decentralization and the attribution theory are among the theoretical review addressed.

#### 2.2.1 Agency Theory

The theory of Jensen and Meckling (1976) is the anchor of current research. The idea of the agency describes the connection between agents and principals. It is about addressing issues that may occur in agency interactions; that is to say, between agents of the principal (the accounting officers) and principal (government). The two issues addressed in the agency theory are: the problems arising when the principal's wishes and/or objectives are met, and the principal cannot check the agent's performance (because this is difficult and/or expensive), and the problems arising when the agent agent and principal are at different risk positions. The principal and agent may, because of differing risk tolerances, be motivated to take divergent measures. Shankman (1999) further contends that agency theory highlights the connection between one player, and

the group (the agent), that has particular duties for another player, or group (the principal) for their economic relationship.

Eisenhardt (1989) has identified problems that could arise in the interpersonal relationship; the aim of principal and agent conflict is to cost the principal the responsibility for monitoring and evaluating the agent's actions, and it is difficult for the principal to monitor and assess the agent's actions. The Agency's partnership focuses on choosing appropriate governance frameworks between the principle and the officer to ensure that the agents and managers are effectively aligned. The purpose is to guarantee that the agent serves the interests of the principal, reducing the expenses of the agency. Both outcome and behavioral contracts are used for this purpose. The Agency theory focuses on a link which reflects the basic structure of a leader and co-operating agency but which has different aims and risk positions.

The connection between two parties is often an agency, where the first is a principle, and the other is a principal in dealings with a third party. Agency relations arise when directors engage the agent to execute a service on behalf of the principle. Leaders often transfer decision-making power to the agents. Problems with the agency may occur when agents are incompetent and information cannot be completed. The theory helped the study by examining the competence of the agent (accounting officers) in the use of public funds for the principal (county government), the agent as it collects county revenue and spends for government, the principal, and to a larger extent the county citizen.

#### 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.

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 budgetary compliance is positively associated with County Governments' performance.

#### 2.2.3 Attribution Theory

The attribution theory is a social psychology theory, created by Schroth and Shah (2000), which examines how individuals understand events and actions and how they attribute reasons to them. Reffett (2007) states that if assessors think that similar people have behaved differently in a particular situation, they (evaluators) are more likely to assign a person blame for the result. On the other hand the assessors prefer to assume responsibility for the result of the circumstance if evaluators think comparable individuals would have behaved in the same way. The first example is based on Zimbelman and Wilks (2004), the second on external or situational qualifications.

Studies suggest that people prefer to attribute others' actions to dispositional patterns and explain their behaviour (Wilks & Zimbelman, 2004; Schroth & Shah, 2000). This is often the case when the conduct seen is negative. Evaluators should thus infer that the internal control on revenue generation is not identified by auditors as a dispositional propensity and the auditors should be careless. Bonner et al. (1998) showed that when auditors fail to identify frequent misappropriations that would result in lower revenues, they are far more likely to be sued, and assessors believed that other auditors could detect fraud. Reffett's (2007) research extends the auditor's liability for the detection of fraud, predicting that auditors will be held more liable for fraud if the auditors do not discover fraud after having recognized fraud as a risk of fraud. Reffett's research results indicate an increase in auditors' duties when auditors detect fraud in the form of fraud risk and processes to investigate the recognized risk of fraud. The findings corroborate the Reffett forecast.

The attribution theory thus suggested that the auditor's report on internal control efficiency. The auditors should thus get in-depth understanding of internal controls,

assess internal monitoring design and execution and monitor internal controls' effectiveness. This is important for auditors to depend on other substantial auditing procedures and possibly decrease their income generation demands. Bonner et al. (1998) says that inspectors may use audit methods to prove carelessness if internal control-related fraud does not occur to auditors. This idea is important to the research because when fraud happens, identifiable persons are held responsible and auditors are likely to be liable if assessors decide that the under-standard audit services have been given.

#### **2.3 Determinants of County Performance**

Determinants of county performance include; budgetary compliance, revenue transfer, local revenue collection and recurrent spending.

#### 2.3.1 Budgetary Compliance

It is traditional for most organizations to establish a budget at the beginning of each period that guide towards meeting the objectives of the organization within the specified predetermined estimate that depends on the management of the organization (Bashuna, 2013). The scope of the budget will determine the level of operations to be carried out and proper budgetary compliance will aid in decision making as it tracks the level of performance of every activity and then identifying underperformed activities that may require revision or possible elimination (Mohamed, Evans & Tirimba, 2015).

In order to keep in line with the objectives of the organization, every function within the organization must meet its stated budget and thus ultimately making it possible for the objectives of the organization to be achieved. Budgetary compliance is therefore important as it makes this possible through coordinating and monitoring of the various functions (Abdullahi, Abubakar, Kuwata & Muhammad, 2015). Budget is normally made available in quarterly amounts at the beginning of each quarterly and this means that even if one wants to fast track purchase of goods and services the process is dependent on the availability of the budget (Ocharo, 2019).

#### 2.3.2 Revenue Transfer

The national government funds the county government through the appropriation which is drawn from the consolidated funds and outsourced revenue from the local activities within the county. These activities that the county relies on have not been sufficient for the counties to meet the huge responsibilities. Office of the Controller of budget confirmed that revenue allocation is one of the factors affecting the performance by the counties (CoB, 2015).

The disbursement of resource allocated on time ensures timely achievement and performance of the county government. The constitution of Kenya guides the counties in proper management of the resources. Furthermore, prudence in financial management as directed by the PFM Act 2012. The accomplishment of the predetermined performance relies on the funds allocated. Utilization of the allocated funds and execution of the projects depends on prudential management of the counties (AGBIRR, 2016).

#### 2.3.3 Local Revenue Collection

The county government revenue collection has a key role in contributing to the county government excellent performance. Inadequate allocation of funds from the national government necessitate for revenue collections. Revenue collections in the county government enhance county performance through availing more resources (KNBS, 2016).

The funds from national government have not been sufficient to meet huge demands in the county government. The financial deficit in the counties requires local revenue collection to promote service delivery. The county revenue collection supports key services such as health, water, sewerage, and roads. County revenue collection improves efficiency. It concentrates on property and rates, entertainment taxes, charge for services provided and licensing. Therefore, county government needs legal framework which is a paramount tool and foundation aspect of county revenue collection system. Furthermore, county government lack adequate legislative framework to effect imposition of tax and fee to support county performance and service delivery (Mutungi, 2017).

#### 2.3.4 Recurrent Spending

Counties started in 2013 with the priority of creating structures, including the county public service, to implement devolved functions such as agricultural services, healthcare, and pre-primary education, making a steep growth in wage bills almost inevitable. However, over time the high cost of paying county government officials' salaries and allowances is negating the gains of devolution. An in-depth data analysis of the county spending data on the latest report by the Controller of Budget (COB) shows some counties have shot through the salaries spending ceilings (CoB, 2018).

In compliance with the Public Finance Management Regulations (2015), county governments should ensure that expenditure on personnel emolument is contained at a sustainable level. A lower wage bill-to-GCP ratio does not necessarily mean the county public service is more efficient it could mean county public servants in crucial fields are underpaid and unable to press for better conditions of service. What the county governments need to guard against more are loss of funds through a bloated workforce and dubious payments.

#### **2.4 Empirical Review**

International and local researches have been performed supporting the link between budgetary compliance and performance. The studies are discussed in this section.

#### 2.4.1 Global Studies

Adam et al. (2012) conducted an empirical study in Europe and North America to investigate the association between fiscal decentralization and public sector efficiency. The research used comparative in nature while pooled OLS was utilized for data analysis. The study discovered an inverted U-shaped association between government efficiency in provision of this service and fiscal decentralization, regardless of whether it involves education or health care. This study was conducted in developed economies and therefore a contextual gap.

Wei-qing and Shi (2014) did an empirical study in China on decentralization and performance. The study was longitudinal in nature relying on time series secondary data and utilizing a vector error correction model. According to the research, fiscal decentralization on expenditure tended to motivate governments to invest fiscal expenditure on infrastructure in order to attract outside capital to grow local economies, but it also resulted in a reduction in the supply of public services like education. The research also revealed that fiscal decentralization had the greatest negative impact on public education provision in Central and West China, and the least in Northeast China. The study reveals a conceptual gap as it did not relate absorption rate with performance of county governments. In a related study in Europe, Sow and Razafimahefa (2015) observed that fiscal decentralization enhanced public service delivery efficiency, though only under certain conditions, such as acceptable political and institutional settings and a significant level of decentralized spending and revenues. Fiscal decentralization can degrade the effectiveness of public service delivery if those prerequisites are not met, according to the experts. The research focused on efficiency, which is not the same as performance.

Freinkman and Plekhanov (2019) investigated the link between budgetary decentralization and public services quality in Russia's areas. The study population was the 17 regions in Russia while a generalized method of moments was utilized. The findings revealed that fiscal decentralization has no significant impact on key secondary education inputs like schools, computers, or the availability of preschooling, but has a substantial positive impact on average examination results after controlling for key observable inputs and regional government education spending. Decentralization has a positive impact on the quality of municipal utility provision, according to the research. The study did not establish how budgetary compliance influences performance of the regions.

Schubert and Kirsten (2021) examine the effect of budgeting control on the financial performance of SMEs in Germany. The study used the quantitative technique where data was gathered from the local business owner of SMEs located in Germany's three cities Munich, Berlin and Stuttgart because they have a high number of SMEs. Surveys were self-administered and also sent out to the business owners. The research instruments adopted included questionnaires and the interview guide. The study found that performance integrates the organization's strategic planning with budgets and

processes of cost control. The performance also identifies the budgeting /financial skills required for better decision-making and identifies key financial indicators for the business and how and when to monitor them. The social and economic setting of Germany is different from Kenya where the current study will be conducted.

#### 2.4.2 Local Studies

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. Ordinary Least Squares Method was applied to estimate the components of the regression 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 presents a conceptual gap as the effect of budgetary compliance on performance was not considered.

Ndung'u (2014) analyzed the impact of devolution in Kenya if a decentralized government was adopted. 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.

Mbau, Iraya, Mwangi, and Njihia (2019) examined the impact of fiscal decentralization on the performance of Kenyan county governments. The research defined and used three fiscal decentralization indicators. These are the proportions of government money received by county governments to local revenue collections. The other is transfer grants, which are described as cash received from both the national government and development partners that are both conditional and unconditional. The model's parameters were estimated using multiple regression analysis and correlation analysis. The research was descriptive in nature and relied on panel data. The county government was used as the unit of analysis, and the population of the study was made up of all 47 counties. The findings show that the factors in the model account for 27.43% of variability in county government performance, with equitable share having the most significant impact. The budgetary compliance was not taken into account in this study.

Ocharo (2019) sought to identify the extent to which budget execution affects the performance of county governments in Kenya. The research identified four variable that is gross county product, local revenue, absorption rate and personal emolument and how they affect the gross county product for each county. The research used secondary data and analysis involved correlation and regression analysis. The findings imply that the independent variable affects the dependent variable and therefore if they are increases then the gross county product for each county will improve for all the years under research. This shows that there is a need of improving the revenue collected by the county government. The effect of budgetary compliance on performance was however not taken into account.

21

Kipkirui (2020) sought to establish effect of budget absorption on the performance of county government. Budget absorption was supported by planning, organizing and a quality expenditure control tool. The research focused on the forty-seven counties. The secondary data was obtained from KNBS and CoB. The results revealed that budget ensures efficiency and effectiveness to the limited allocated resources. Budget is a management and regulation tool used to effectively manage the public funds with the aim of efficiently optimizing financial realization performance targets. The study did not incorporate budgetary compliance as a variable that influences performance.

#### 2.5 Summary of the Literature Review and Research Gaps

There are a few theoretical frameworks which have expounded on the theoretically anticipated relationship between budgetary compliance and performance. Theories covered in this review were; agency theory, modern fiscal decentralization theory, and the attribution theory. The Key county performance determinants have also been looked into in this chapter. More so, a few empirical studies done not only locally but also globally on the study variables have been examined. The findings of these investigations were debated.

Methodological, contextual and conceptual gaps are apparent from the evaluation of empirical research. Conceptually, the findings from extant empirical studies are inconsistent and this might be explained by the different operationalization of variables. Methodologically, previous studies have used different methodologies ranging from time series studies to panel analysis and this can explain the differences in findings. Contextually, most of the previous studies have focused on developed economies whose social and economic settings are different from those of Kenya which was the focus of the current study.

#### **2.6 Conceptual Framework**

The model below depicts the anticipated relationship between the research variables. The independent variable for the study was budgetary compliance as measured by actual expenditure to budgeted expenditure. The control variables were revenue transfer measured as the amount received from the national government to total approved budget, local revenue collection measured as a ratio of approved budget and operating expenses given as a ratio of total expenditure. The dependent variable was performance of county government as measured by gross county product.

#### Independent variable

#### **Dependent variable**

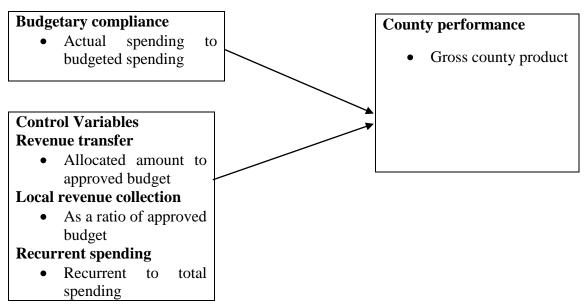


Figure 2.1: The Conceptual Model

Source: Researcher (2022)

#### **CHAPTER THREE: RESEARCH METHODOLOGY**

#### **3.1 Introduction**

The chapter designates the approaches utilized in accomplishing the research objective which was to determine how budgetary compliance affects performance of county governments. In particular, the study highlighted; data analyses, diagnostic test, research design and data collection.

#### **3.2 Research Design**

A research design denotes the master plan for collecting, measuring and analyzing data (Sekeran & Bougie, 2015). Descriptive design was adopted in this study. This design was appropriate since the nature of the phenomena is of key interest to the researcher (Khan, 2008). It was also sufficient in defining the interrelationships of the phenomena. According to Cooper and Schindler, (2008), design also validly and accurately represented the variables thereby giving sufficient answers to the study questions.

#### **3.3 Population**

Population refers to an aggregate of subjects sharing common or similar characteristics (Kothari, 2017). In respect of this study, population of the study was the 47 counties in Kenya, since the population is relatively small, the study was a census of all the counties.

#### **3.4 Data Collection**

Secondary data was utilized in this research. The data was obtained from the office of the Auditor General, office of the Controller of the Budget, Kenya National Bureau of Statistics (KNBS) as well as reports from Annual Government Budget Implementation Review Reports (AGBIRR). The data was collected for 5 years (2017 to 2021) on an annual basis. The data collection schedule was as shown in Appendix II.

### **3.5 Diagnostic Tests**

The linear regression is based on a various assumption inclusive of linearity, no autocorrelation, no or little multi-collinearity, homoscedasticity and multivariate normality. The diagnostic tests performed are outlined in Table 3.1

| Assumption         | Description   | Test                         | Interpretation   | Treatment   |
|--------------------|---|------------------------------|--|---|
| Normality          | To verify normal distribution, the test is conducted  | Shapiro–<br>Wilk test        | If p values are<br>above 0.05, the<br>variables are<br>normally<br>distributed | application<br>of square<br>roots or logs<br>to non-<br>normality |
| Multicollinearity  | The phenomenon<br>known as<br>multicollinearity<br>occurs when<br>there is a<br>connection<br>between many<br>variables, which<br>then leads to the<br>standard errors<br>distorting the<br>regression<br>analysis. | VIF Test                     | Multicollinearity<br>exist where the<br>VIF > 10                               | Eliminate<br>highly<br>correlated<br>variables.                   |
| Heteroscedasticity | to determine<br>whether the<br>model's or the<br>errors' variance is<br>different for each<br>observation   | Breusch–<br>Pagan<br>test    | Heteroscedasticity<br>exist where the p-<br>value p<0.05)                      | Use Natural<br>log of<br>variables                                |
| Autocorrelation    | To determine the<br>value of a single<br>variable by<br>considering other<br>variables that are<br>connected to it.   | Breusch-<br>Godfrey<br>test. | If p-values are<br>lower than 0.05,<br>autocorrelation is<br>present.          | Hildreth-Lu<br>Procedure  |

#### Table 3.1: Diagnostic Tests

| Stationarity test  | In order to      | ADF test | If p values are     | Use Natural |
|--------------------|------------------|----------|---------------------|-------------|
|                    | evaluate whether |          | below 0.05, unit    | log of      |
|                    | or not a time    |          | roots exist.        | variables   |
|                    | series variable  |          |                     |             |
|                    | has a unit root  |          |                     |             |
|                    | and whether or   |          |                     |             |
|                    | not it is        |          |                     |             |
|                    | stationary       |          |                     |             |
| Hausman            | To differentiate | Hausman  | Use fixed effects   | Use natural |
| specification test | between fixed-   | test     | model if p value is | log of      |
|                    | effects and      |          | less than 0.05 and  | variables   |
|                    | random-effects   |          | random effects if   |             |
|                    | models and       |          | otherwise           |             |
|                    | identify the     |          |                     |             |
|                    | optimal one      |          |                     |             |

#### **3.6 Data Analysis**

In analysis of data, version 16 of Stata software was used. Tables presented the findings in a quantitative manner. For every variable, descriptive statistic were employed in the calculation of central trend measures as well as dispersion such as mean as well as standard deviation. Inferential statistics relied on correlation as well as regression. The strength of the association among variables in the study was determined via correlation and a regression determined cause-effect characteristics among variables. Multiple regression linearly determined relation among study variables.

#### **3.6.1 Analytical Model**

The regression model below was used:

 $Y_{it} = \alpha + \beta_1 X_{1it} + \beta_2 X_{2t} + \beta_3 X_{3it} + \beta_4 X_{4it} + \varepsilon.$ 

Where:  $Y_{it}$  = Performance of a county as measured by gross county product.

 $\alpha$  =Constant value in absence of predicator variables

 $\beta_{1...}\beta_4$ =are the regression coefficients

 $X_{1it}$  = Budgetary compliance measured as the ratio of actual spending to budgeted spending

 $X_{2it}$ = Revenue transfer given by the ratio of amount located by national government to approved county budget

 $X_{3it}$ = Local revenue collection given by the ratio of revenue collected to approved budget

 $X_{4it}$ = Recurrent spending as measured by the ratio of recurrent expenditure to total expenditure

 $\epsilon$  =error term

#### **3.6.2** Tests of Significance

Parametric tests determined the general model and individual variable's significance. The F-test determined the overall model's significance and this was achieved by means of ANOVA while a t-test determined coefficient significance.

#### **CHAPTER FOUR: DATA ANALYSIS RESULTS AND FINDINGS**

#### **4.1 Introduction**

This section presents descriptive statistics, outcomes and interpretations of various tests namely; test of normality, Multicollinearity, heteroskedasticity tests, autocorrelation and stationarity test. The chapter also presents the results of Pearson correlation and regression analysis.

#### 4.2 Descriptive Statistics

This part presents the descriptive findings from the collected figures. The descriptive results include mean and standard deviation for each of the research parameters. The analyzed figures were gotten from the auditor general's office reports and individual county government annual reports for 5 years (2017 to 2021). The number of observations is 235 (47\*5) as all the 47 county governments provided complete data for the 5 year period. The outcomes are as shown in Table 4.1

|                          | Ν   | Minimum | Maximum | Mean     | Std.      |
|--------------------------|-----|---------|---------|----------|-----------|
|                          |     |         |         |          | Deviation |
| Performance              | 235 | .160    | 19.770  | 1.78923  | 1.712609  |
| Budgetary compliance     | 235 | 2.400   | 178.500 | 64.74685 | 23.932005 |
| Revenue transfer         | 235 | 60.880  | 127.610 | 84.55609 | 6.737274  |
| Local revenue collection | 235 | 6.630   | 204.770 | 64.40102 | 26.482706 |
| Recurrent spending       | 235 | 34.800  | 78.000  | 60.28681 | 8.238333  |
| Valid N (listwise)       | 235 |         |         |          |           |

#### **Table 4.1: Descriptive Results**

Source: Research Findings (2022)

#### **4.3 Diagnostic Tests**

Diagnostic tests done by the researcher to ensure the assumptions of Classic Linear Regression Model (CLRM) are not violated and to obtain suitable models for examining in the consequence that the CLRM hypotheses are infringed. Consequently, the pre and post approximation analysis were carried out before processing regression model. This tests were namely; normality, Multicollinearity, heteroskedasticity, autocorrelation and stationarity. The study refrained from factitious regression results by getting this analysis.

#### 4.3.1 Normality Test

The normality of data can be tested using various methods. The following methods are often used include the Shapiro–Wilk test and Kolmogorov–Smirnov test. The Shapiro–Wilk test is best for small sample sizes (n <50 samples), while it can also be used on more extensive samples selections, whereas the Kolmogorov–Smirnov test is best for n>50 samples. As a result, the study used the Kolmogorov–Smirnov test as the numerical method of determining normality. Null hypothesis for these tests states that the data was obtained from a normally distributed population. The hypothesis is rejected when P-value is less than 0.05, and the figures are said to be not normally distributed.

| <b>Table 4.2:</b> | Test for | <ul> <li>Normality</li> </ul> |
|-------------------|----------|-------------------------------|
|                   |          |                               |

|                          | Kolmogorov-Smirnov | <b>P-value</b> |
|--------------------------|--------------------|----------------|
| Performance              | .161               | .853           |
| Budgetary compliance     | .173               | .822           |
| Revenue transfer         | .178               | .723           |
| Local revenue collection | .175               | .812           |
| Recurrent spending       | .176               | .784           |

**Source: Research Findings (2022)** 

From Table 4.2 results, all the study variables have a p value more than 0.05 and therefore were normally distributed.

#### 4.3.2 Multicollinearity Test

Multicollinearity occurs when the independent variables in a regression model are significantly linked. Multicollinearity was assessed using the VIF and tolerance indices. When the VIF value is higher than ten and the tolerance score is less than 0.2, multicollinearity is present, and the assumption is broken. The VIF values are less than 10, indicating no problem with multicollinearity.

#### Table 4.3: Multicollinearity

| ice VIF |
|---------|
|         |
| 1.988   |
| 3.226   |
| 2.632   |
| 1.416   |
|         |

**Source: Research Findings (2022)** 

#### 4.3.3 Heteroskedasticity Test

The residual variance from the model must be constant and unrelated to the independent variable in linear regression models calculated using the Ordinary Least Squares (OLS) method(s). Homoskedasticity refers to constant variance, whereas heteroscedasticity refers to non-constant variance. The study used the Breusch-Pagan/Cook-Weisberg test to determine if the variation was heteroskedastic. The hypothesis implies constant variance, indicating that the data is homoscedastic. The outcomes are as shown in the table below.

**Table 4.4: Heteroskedasticity Results** 

#### Breusch-Pagan / Cook-Weisberg test for heteroscedasticity

| chi2(1)     | = | 0.8241 |
|-------------|---|--------|
| Prob > chi2 | = | 0.6089 |

#### Source: Research Findings (2022)

Table above reveals that the hypothesis was accepted since the p-value was 0.6089, which was greater than 0.05. As a result, the dataset had homoskedastic variances. Since the P-values of Breusch-Pagan's test for homogeneity of variances were more than 0.05. The test therefore confirmed homogeneity of variance. The data can therefore be used to conduct panel regression analysis.

#### **4.3.4** Autocorrelation Test

Serial correlation, also known as autocorrelation, makes the standard errors of coefficients appear to be less than in linear panel data models, resulting in higher R-squared and erroneous hypothesis testing Autocorrelation was verified via Durbin-Watson test. If the Durbin-Watson test results in a value close to 2, the error terms of regression variables are uncorrelated (i.e. between 1 and 3). The figure will be better if it is nearer to 2. The outcomes are presented in the table below.

#### **Table 4.5: Test of Autocorrelation**

| Durbin Watson Statistic |  |
|-------------------------|--|
| 2.093                   |  |

#### Source: Research Findings (2022)

The Durbin-Watson value was 2.093, according to the findings in Table 4.5. The fact that the Durbin-Watson statistic was near to 2 demonstrates that the error terms of regression variables are uncorrelated.

#### 4.3.5 Stationarity Test

The research variables were subjected to a group data unit-root test to establish if the data was stationary. This test was Levin-Lin Chu unit root test. At a standard statistical significance level of 5%, the test was compared to their corresponding p-values. The null hypothesis for this test states that every group has a unit root while the alternative hypothesis states that at least one panel are stationary. The table below shows Levin-Lin Chu unit root test outcomes.

| Levin-Lin Chu unit-root test     |           |         |            |  |  |
|----------------------------------|-----------|---------|------------|--|--|
| Variable                         | Statistic | p value | Comment    |  |  |
| Performance                      | 6.8124    | 0.0000  | Stationary |  |  |
| Budgetary compliance             | 7.1712    | 0.0000  | Stationary |  |  |
| Revenue transfer                 | 6.8569    | 0.0000  | Stationary |  |  |
| Local revenue collection         | 8.0468    | 0.0000  | Stationary |  |  |
| Recurrent spending               | 6.9335    | 0.0000  | Stationary |  |  |
| Source: Research Findings (2022) |           |         |            |  |  |

Table 4.6: Levin-Lin Chu unit-root test

As demonstrated by the above table this test concludes that the figures are stationary at a statistical significance level of 5% as the p-values all fall below 0.05.

#### 4.3.6 Hausman Test

When using panel data, it is necessary to establish if a fixed or random effect model is more desirable. For the purpose of choosing the best panel regression model, the Hausman specification test was used. In essence, a Hausman specification test determines if the unique errors have a relationship to the regressors, with the null hypothesis being that they do not (random effect is preferred). Fixed effects were utilized when the P-value was significant (below 0.05), while random effects were used otherwise. The outcomes of the Hausman test are shown in the table below.

#### **Table 4.7: Hausman Test Results**

| chi2(4)    | P-Value  |
|------------|--|
| 0.06       | 0.8296   |
| Null Hypot | hesis: The appropriate model is Random Effects |

Source: Research Findings (2022)

#### **4.4 Correlation Results**

To determine the degree and path of link of each predictor variable and the response variable, correlation analysis was carried out. The correlation findings in Table 4.8 show the degree of association among the research variables in terms of strength and direction.

### **Table 4.8: Correlation Results**

|   |   | Performance | Budgetary compliance |       | Local<br>revenue<br>collection | Recurrent spending |
|---|---|-------------|----------------------|-------|--------------------------------|--------------------|
| Performance   | Pearson<br>Correlation<br>Sig. (2-<br>tailed) | 1           |                      |       |                                |                    |
| Budgetary   | Pearson<br>Correlation                        | .155*       | 1                    |       |                                |                    |
| compliance  | Sig. (2-<br>tailed)                           | .018        |                      |       |                                |                    |
| Revenue   | Pearson<br>Correlation                        | .468**      | .187**               | 1     |                                |                    |
| transfer  | Sig. (2-<br>tailed)                           | .000        | .004                 |       |                                |                    |
| Local revenue   | Pearson<br>Correlation                        | .232**      | .198**               | .038  | 1                              |                    |
| collection  | Sig. (2-<br>tailed)                           | .000        | .002                 | .565  |                                |                    |
| Recurrent   | Pearson<br>Correlation                        | .032        | .175***              | .152* | .001                           | 1                  |
| spending  | Sig. (2-<br>tailed)                           | .621        | .007                 | .020  | .983                           |                    |
| *. Correlation is significant at the 0.05 level (2-tailed). |   |             |                      |       |                                |                    |

\*\*. Correlation is significant at the 0.01 level (2-tailed).

c. Listwise N=235

#### Source: Research Findings (2022)

The correlation outcomes disclose that budgetary compliance has a weak positive as well as significant link with performance of county governments in Kenya (value of r is 0.155) at 5 percent significance level. Revenue transfer has a moderate positive as well as significant link with performance of county governments in Kenya (value of r is 0.468) at 5 percent significance level. The outcomes further disclose that local revenue collection and performance of county governments in Kenya have a positive as well as significant correlation (value of r is =0.232) at 5 % significance level. The correlation results also reveal a positive relationship between recurrent spending and performance of county governments in Kenya the relationship is not significant at the level of 5%.

#### **4.5 Regression Results**

To know the degree to which performance is described by the chosen variables, regression analysis was used. In the table below the regression's findings were displayed. Through the conclusions as epitomized by the  $R^2$ , the studied independent variables explained variations of 0.2472 in performance among county governments in Kenya. This suggests that other factors account for 75.28% of the variability in performance among county governments in Kenya, while the four variables account for 24.72% of those variations. The significance level of the data was 0.000, according to Table 4.9's ANOVA results, which proposes that the model is a fit choice for drawing conclusions about the variables.

| Performance              | Coef.   | Std. Err. | P>t    |
|--------------------------|---------|-----------|--------|
| Budgetary compliance     | 0.0445  | 0.0004    | 0.4632 |
| Revenue transfer         | 0.4352* | 0.0153    | 0.0000 |
| Local revenue collection | 0.1582* | 0.0121    | 0.0073 |

#### **Table 4.9: Regression Results**

| Recurrent spending | 0.0071   | 0.0041 | 0.9053 |
|--------------------|----------|--------|--------|
| _cons              | -0.7834* | 0.0362 | 0.0000 |
| Model Summary      |          |        |        |
| R-squared          | 0.2472   |        |        |
| Wald chi2(4)       | 18.901   |        |        |
| Prob > chi2        | 0.0000   |        |        |
| * p<0.05           |          |        |        |

**Source: Research Findings (2022)** 

The coefficient of regression model was as below;

#### $\mathbf{Y} = -0.7834 + 0.4352\mathbf{X}_1 + 0.1582\mathbf{X}_2$

Where:

Y = Performance  $X_1$  = Revenue transfer;  $X_2$ = Local revenue collection

#### 4.6 Discussion of Research Findings

This research aimed to demonstrate how budgetary compliance affects performance among county governments in Kenya. The research used a descriptive plan while the 47 county governments in Kenya were the population. Data was collected from all the 47 county governments. The research depended on secondary data which was gotten from Office of the Auditor General and individual county governments annual reports. Budgetary compliance was measured as the ratio of actual spending to budgeted spending. The control variables were revenue transfer, local revenue collection and recurrent spending. Descriptive and inferential statistics were used in the analysis of data. The outcomes are elaborated in this part.

The correlation outcomes disclose that budgetary compliance has a weak positive as well as significant link with performance of county governments in Kenya. Revenue transfer has a moderate positive as well as significant link with performance of county governments in Kenya. The outcomes further disclose that local revenue collection and performance of county governments in Kenya have a positive as well as significant correlation. The correlation results also reveal a positive relationship between recurrent spending and performance of county governments in Kenya but the relationship is not significant.

Multivariate regression outcomes revealed that the R-squared was 0.2472 suggesting that 24.72% of changes in performance of county governments in Kenya are due to the four variables selected for this study. This means that variables not considered explain 75.28% of changes in performance of county governments in Kenya. The overall model was statistically significant and had a p value of 0.000 that is below the 0.05 significance level. This suggests that the overall model had the required goodness of fit.

The multivariate regression analysis further revealed that individually, both revenue transfer and local revenue collection had a positive and substantial effect on performance of county governments in Kenya as shown by ( $\beta$  value is 0.4352, p value is 0.0000) and ( $\beta$  value is 0.1582, p value is 0.0073) correspondingly. Budgetary compliance unveiled a positive influence though not statistically significant on performance of county governments in Kenya ( $\beta$  value is 0.0445, p value is 0.4632). Recurrent spending displayed a positive but not significant influence on performance of county governments in Kenya as shown by ( $\beta$  value is 0.0071, p value is 0.9053).

These outcomes agree with Mbau et al. (2019) who examined the impact of fiscal decentralization on the performance of Kenyan county governments. The research defined and used three fiscal decentralization indicators. These are the proportions of government money received by county governments to local revenue collections. The other is transfer grants, which are described as cash received from

both the national government and development partners that are both conditional and unconditional. The model's parameters were estimated using multiple regression analysis and correlation analysis. The research was descriptive in nature and relied on panel data. The county government was used as the unit of analysis, and the population of the study was made up of all 47 counties. The findings show that the factors in the model account for 27.43% of variability in county government performance, with equitable share having the most significant impact. The budgetary compliance was not taken into account in this study.

The results also concur with Kipkirui (2020) who sought to establish effect of budget absorption on the performance of county government. Budget absorption was supported by planning, organizing and a quality expenditure control tool. The research focused on the forty-seven counties. The secondary data was obtained from KNBS and CoB. The results revealed that budget ensures efficiency and effectiveness to the limited allocated resources. Budget is a management and regulation tool used to effectively manage the public funds with the aim of efficiently optimizing financial realization performance targets.

# CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS

#### **5.1 Introduction**

This chapter includes a summary of statistical findings, conclusions drawn from these data, study contributions, and policy recommendations for each research hypothesis. The chapter also discusses the study's limitations and potential research prospects.

#### **5.2 Summary**

The study aimed at examining how budgetary compliance impact performance of Kenyan county governments. The parameters chosen for this analysis are; budgetary compliance, revenue transfer, local revenue collection and recurrent spending. A descriptive study design was chosen. The data gathered was secondary in nature from office of the auditor general and was analyzed by both descriptive and inferential statistics. Yearly data for 47 county governments for five years from 2017 to 2021 was obtained from their annual reports.

The correlation outcomes disclose that budgetary compliance has a weak positive as well as significant link with performance of county governments in Kenya. Revenue transfer has a moderate positive as well as significant link with performance of county governments in Kenya. The outcomes further disclose that local revenue collection and performance of county governments in Kenya have a positive as well as significant correlation. The correlation results also reveal a positive relationship between recurrent spending and performance of county governments in Kenya but the relationship is not significant.

Multivariate regression outcomes revealed that the R-squared was 0.2472 suggesting that 24.72% of changes in performance of county governments in Kenya are due to

the four variables selected for this study. This means that variables not considered explain 75.28% of changes in performance of county governments in Kenya. The overall model was statistically significant and had a p value of 0.000 that is below the 0.05 significance level. This suggests that the overall model had the required goodness of fit.

The multivariate regression analysis further revealed that individually, both revenue transfer and local revenue collection had a positive and substantial effect on performance of county governments in Kenya. Budgetary compliance unveiled a positive influence though not statistically significant on performance of county governments in Kenya. Recurrent spending displayed a positive but not significant influence on performance of county governments in Kenya.

#### **5.3 Conclusions**

The goal of the research was to find out budgetary compliance related to performance among county governments in Kenya. The study results revealed that budgetary compliance had a positive as well as significant correlation with performance, which might mean that devolved units with higher budgetary compliance are more likely to post better performance. This is explainable by the fact that higher budgetary compliance implies effective spending which might translate to county performance.

The findings indicated that revenue transfer had a positive as well as significant effect on performance. This implies that devolved units that receive high revenue transfer are likely to post better performance than devolved units that receive less revenue. The findings also implies that the amount of revenue being devolved from national government to county governments have a significant effect on their performance. The study results showed that local revenue collection had a positive as well as significant effect on performance. This may mean that the higher proportion of local revenue collection to revenue target is likely to lead to higher levels of performance. This can be explained by the fact that devolved units that collect more revenue are likely to undertake more projects leading to higher performance and development compared to counties with less revenue collection.

Moreover, the conclusions revealed that recurrent spending has no significant effect on performance. This implies that devolved units with higher recurrent spending do not always report higher performance compared to devolved units with low recurrent spending. This can be explained by the fact that recurrent spending does not always translate to increase efficiency in providing goods and services.

#### **5.4 Recommendations for Policy and Practice**

The research finding reveals that revenue transfer contributes to an increase in performance of county governments. The study therefore recommends that policy makers such as members of parliament should come up with policies that increase revenue transfer to the counties as this will lead to a rise in performance of devolved units. County heads should also advocate for an increase in revenues allocated to the counties.

Further, budgetary compliance was discovered to possess a positive correlation with performance. The study therefore recommends that devolved units in Kenya should strive to have a higher budgetary compliance of the devolved funds as increased utilization of the funds leads to more development activities which in return enhance county performance. From the study findings, local revenue collection had a significant positive effect on performance. Therefore, the research recommends that heads of devolved units should develop strategies aimed at increasing local revenue collection without hurting the businesses as a rise in local revenue yields a rise in performance. Members of the county assembly should also develop policies aimed at increasing the local revenue tax base.

#### 5.5 Limitations of the Study

This study was only conducted for five years between 2017 and 2021 due to time and cost constraints. There is no surety for the study findings to hold beyond the period studied. Furthermore, it is uncertain whether the findings would hold beyond 2021. Also because of constraints in time and finance, the research was only done on county governments; there is no surety for the study findings to hold if government agencies or ministries were examined.

The focus was on various factors which are thought to influence performance among Kenyan county governments. The study specifically examined four explanatory factors. Though, in certainty, there is presence of other variables probable to influence performance among Kenyan county governments including internal like corporate governance mechanisms whereas others are beyond the control of the firm like inflationary pressures as well as political stability.

The data quality was the main restriction for this research. It is impossible to conclusively conclude that the study's findings accurately reflect the current reality. It was presumed that figures utilized in the research are accurate. Due to the current conditions, there has also been a great deal of incoherence in the data measurement.

The research used secondary data rather than primary data. Due to the limited availability of data, only some of the performance drivers have been considered.

The data analysis was performed using regression models. Due to restrictions associated with using the model, like inaccurate findings resultant from changes from the varying value, the researchers are not be able to generalize the conclusions precisely. A regression model cannot be performed using the prior model after data is added to it.

#### **5.6 Suggestions for Further Research**

This research concentrated on county governments in Kenya. Further studies can focus on a wide scope by covering other firms in the Kenyan public sector to agree or differ with the results of the current research. Further, this research focused on only four determinants of county governments' performance. Future studies should focus on other performance determinants that were not considered in this study.

The current research scope was restricted to five years; more research can be done past five years to determine whether the results might persist. Thus, inherent future studies may use a wider time span that can either support or criticize the current research conclusions. The scope of the study was additionally constrained in terms of context where Kenyan county governments were examined. Further studies can be extended to other firms to establish if they complement or contradict the current study findings. Researchers in the East African region, the rest of Africa, and other global jurisdictions can too perform the research in these establishments to make sure the current research conclusions will persist.

The research only used secondary data; alternate research may use primary data sources such in-depth questionnaires and structured interviews given to practitioners and stakeholders. These can then affirm or criticize the results of the current research. The research used multiple linear regression and correlation study; future research could use other analytic techniques such factor analysis, cluster analysis, granger causality, discriminant analysis, and descriptive statistics, among others.

#### REFERENCES

- Abdullahi, S. R., Abubakar, M. A., Kuwata, G., & Muhammad, T. A. (2015). The role of budget and performance on organizational performance: a case study of Tahir Guest House, Kano State, Nigeria. *International Journal of Innovative Research in Information Security*, 4(2), 22–28
- Adam, A., Delis, M. D., & Kammas, P. (2012). Fiscal decentralization and public sector efficiency: Evidence from OECD countries. *Munich Personal RePEc Archive*.
- Adongo, O. & Jagongo, K. (2013). Performances as a measure of financial performance of state corporation in Kenya). *International Journal of Business and Management Invention*, 13(1), 44-56
- Akorsu, P. K. (2015). An evaluation of the effectiveness of revenue mobilisation in the public sector of Ghana the case of cape coast metropolitan assembly. *International Journal of Economics, Commerce and Management, 3*(1), 1-16.
- Aslam, G., &Yilmaz, S. (2011). Impact Of Decentralization Reforms in Pakistan on Service Delivery, An Empirical Study. *Public Administration and Development*, 3(1); 159–171.
- Balunywa, W., Nangoli, S., Mugerwa, G. W., Teko, J., &Mayoka, K. G. (2014). An analysis of fiscal decentralization as a strategy for improving revenue performance in Ugandan Local governments Journal of Research in *International Business and Management*, 4(2), 28-36.

- Bashuna, A. (2013). Factors affecting effective management of the procurement function at Nakuru North Sub-County. World Academic Journal of Business & Applied Sciences, 1(7), 262–291.
- Batra, R., & Verma, S. (2017). Capital budgeting practices in Indian companies. *IIMB Management Review*, 29(1), 29–44.

Controller of the Budget, (2015). Budget implementation review reports.

- Cooper, R., & Schindler, S. (2008). Business research methods. New York: Mc Grawhill
- Dick-Sogoe, C. (2012) Survey of literature on fiscal decentralization as a sustainable local development tool in Ghana. *Journal of Sustainable development in Africa*, 14(3);321-332
- Einstnhardt K. (1989). Agency theory assessment and review. *The academy of management review*, 4(1), 57-74.
- Elhiraika, A.B. (2007) Fiscal decentralization and public service delivery in South Africa. *ATPC work in progress no 58*
- Erlina, A. (2017). The Analysis of the Influencing Factors of Budget Absorption. International Journal of Economic Research, 15.
- Faguet, J.P. (2004) Does decentralization increase government responsiveness to local needs? Evidence from Bolivia. London school of economics. London. Elsevier Press.
- Freinkman, L., & Plekhanov, A. (2019). Fiscal decentralization and the quality of public services in Russian regions. Working Paper No. 111.

- Grindle, S.M. (2007) Good enough governance revisited: Poverty reduction and reform in developing countries, *Development Policy Review* 25(5): 553-574
- Halaskova, M. & Halaskova, R. (2014) Impact of Decentralization on the Local Government Expenditures and Public Services in the EU Countries. *Journal of Impact Factor*, 12(3); 811-821
- Hallwood, P., & MacDonald, R. (2010). Picking the right budget constraint for Scotland. Working Papers 2010, Business School - Economics, University of Glasgow.
- Huther, J. & Shah, N. (1998). A simple measure of good governance to the debate on *fiscal decentralization*. ECLAC seminar, world bank, Washington Dc.
- Igbinosun, F. E & Ohiokha, F. I. (2012). Budget and Performance: A Tool for Enhanced Performance in Nigeria Organizations. *Knowledge Review*, 26(3), 113–125.
- Jensen M. C. & Meckling H. (1976). Theory of the firm: Managerial Behavior, agency costs and ownership Structure. *Journal of Financial Economics*, 8(23), 167.
- Kamau, M., Wambua, L., & Mwangulu, J. (2014). A study to assess the influence of citizen participation on decentralized service delivery :a case study of kipipiri, Nyandarua county, Kenya. Unpublished MBA project, University of Nairobi.

Khan, J. A. (2008). Research Methodology. New Delhi. APH Publishing Corporation

- Kipkirui, E. (2020) Effects of budget absorption on performance of county governments in Kenya. Unpublished MSc project, University of Nairobi
- Koriatmaja, S. A. H., & Surasni, N. K. (2020). The Effect of Budget, Budget Execution, Procurement Goods/Services and Human Resources on Absorption Budget (Study at Opd in Central Lombok Regency, West Nusa Tenggara Province, Indonesia). *Global Journal of Management And Business Research*.
- Kothari, C.R (2017). *Research methodology, methods and techniques* (14<sup>th</sup> Ed.), New Delhi: New Age International Publishers.
- Mathenge, M. S., Shavulimo, P. M., & Kiama, M. (2017). Financial factors influencing budget implementation in counties (A survey of selected counties in Kenya). *IOSR Journal of Economics and Finance*, 8(4), 62-96.
- Mbau, E. P., Iraya, C., Mwangi, M., & Njihia, J. (2019). An assessment of the effect of fiscal decentralization on performance of county governments in Kenya. *European Scientific Journal*, *15*(25), 109-115
- Mohamed, I. A., Evans, K., & Tirimba, O. I. (2015). Analysis of the Effectiveness of Performance Techniques on Organizational Performance at Dara- Salaam Bank Headquarters in Hargeisa Somaliland. *International Journal of Business Management and Economic Research (IJBMER)*, 6(6), 327–340.
- Muoria, E. (2011) An analysis of the effect of corporate governance on performance of commercial state corporations in Kenya. *International Journal of Business and Public Management*, 1(1); 36-41
- Mutungi, Z. W. (2017). Effects of budgeting and performance on financial performance of devolved government in Kenya. University of Nairobi.

Retrieved March 26, 2018 from

http://erepository.uonbi.ac.ke/bitstream/handle/11295/102576/Mutungi%2CZi

- Mwenda, A. K. (2010). Economic and administrative implications of devolution framework established by the constitution of Kenya; Institute of Economic Affairs, Nairobi.
- Ndegwa, S.N. (2002) Decentralization in Africa. A stock taking survey. *Africa Region Working Paper* Series No 40

Ndii, D. (2010). Decentralization in Kenya. Background note. Nairobi

- Ndung'u, G. J. (2014). Analyzing the Impact of Devolution on Economic Development Potentialities in Kenya. *International Affairs and Global Strategy Journal*, 26(9); 1092-1097.
- Nzau, M. (2014). The effect of devolved funds on economic growth in Kenya: Empirical investigation (1993-2012), Unpublished M.A thesis, University of Nairobi
- Oates, W. E. (1972). Fiscal federalism. New York: Harcourt Brace Jovanovich
- Ocharo, A. (2019) Effect of budget execution on the performance of counties. Unpublished MSc project, University of Nairobi.
- Olaoye, F. O & Ogunmakin, A. A. (2014). Performance and Performance in Public Corporations in Osun State. *Journal of Humanities and Social Science*, *19*(7), 59–62.

- Olatona, J. B., &Olomola, P. A. (2015). Analysis of Fiscal Decentralization and Public Service Delivery in Nigeria. *Journal of Economics and Sustainable Development*, 6(9); 832-845
- Polisetty, A. (2016). The impact of budgeting on the performance : A case study of Maha Cements. *Asian Journal of Management Research*, 7(2), 98–103
- Rotich, K. & Ngahu, S. (2015) Factors affecting budget utilization in Kericho County,
   Kenya. International Journal of Economics, Commerce and
   Management, 3(6); 510-527
- Schubert, H., & Kirsten, S. M. (2021). Effect of Budgeting Control on the Financial Performance of SMEs in Germany. *Journal of Finance and Accounting*, 5(2), 1-9.
- Schroth, H. A., & Pradhan Shah, P. (2000). Procedures: Do we really want to know them? An examination of the effects of procedural justice on selfesteem. *Journal of Applied Psychology*, 85(3), 462.
- Sekeran, U. & Bougie, J.R. (2015) Research Methods for Business. A skill building approach.5<sup>th</sup> edition
- Shankran, N.A. (1999). Reframing The Debate Between Agency and Stakeholder Theories of the Firm. *Journal of Business Ethics* 19, 319-334.
- Smith, K (1985) Decentralization and democracy in developing countries. Development in Practice, 14(6);768-779
- Sow, M., & Razafimahefa, F. (2015). Fiscal decentralization and the efficiency of Public Service Delivery

Swaine, S. (2017). Equality Budgeting: Proposed Next Steps in Ireland.

- The Constitution of Kenya (2010). Retrieved May 20, 2018, from http://www.refworld.org/docid/4c8508822.html
- Wei-qing, L., &Shi, C. (2014). Fiscal Decentralization and Public Education Provision in China. *Canadian Social Science*, 6(4), 28-41.
- World Bank, (2000). *Entering the 21<sup>st</sup> century*. *World development report*. Oxford University Press.
- World Bank (2020). *Global findex data: Sub-Saharan Africa*. Retrieved from htpps://org/dataoecd/35/32/43245359.pdf.

## **APPENDICES**

#### **Appendix I: County Governments in Kenya**

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

42. Trans-Nzoia
43. Turkana
44. Uasin Gishu
45. Vihiga
46. Wajir
47. West Pokot
Source: KNBS (2022)

## **Appendix II: Data Collection Schedule**

| Year | GCP | Revenue   | Budgeted | Actual   | Total   | Local      | Recurrent |
|------|-----|-----------|----------|----------|---------|------------|-----------|
|      |     | allocated | spending | spending | revenue | revenue    | spending  |
|      |     |           |          |          |         | collection |           |
| 2017 |     |           |          |          |         |            |           |
| 2018 |     |           |          |          |         |            |           |
| 2019 |     |           |          |          |         |            |           |
| 2020 |     |           |          |          |         |            |           |
| 2021 |     |           |          |          |         |            |           |

|                  |      |             |            |          | Local      |           |
|------------------|------|-------------|------------|----------|------------|-----------|
|                  |      |             | Budgetary  | Revenue  | revenue    | Recurrent |
| <b>County ID</b> | Year | Performance | compliance | transfer | collection | spending  |
| BARINGO          | 2017 | 0.460       | 30.700     | 85.010   | 77.510     | 56.400    |
|                  | 2018 | 1.020       | 59.500     | 85.200   | 97.620     | 60.000    |
|                  | 2019 | 0.680       | 53.900     | 89.200   | 93.110     | 50.300    |
|                  | 2020 | 0.890       | 56.200     | 80.200   | 87.430     | 61.100    |
|                  | 2021 | 1.010       | 93.300     | 88.200   | 86.120     | 54.900    |
| BOMET            | 2017 | 1.240       | 92.400     | 76.440   | 85.170     | 52.200    |
|                  | 2018 | 1.560       | 99.600     | 80.890   | 86.340     | 53.000    |
|                  | 2019 | 1.690       | 94.600     | 78.200   | 88.430     | 70.000    |
|                  | 2020 | 1.220       | 89.600     | 80.890   | 86.160     | 70.100    |
|                  | 2021 | 1.690       | 89.200     | 92.530   | 90.590     | 63.900    |
| BUNGOMA          | 2017 | 1.550       | 15.300     | 86.000   | 6.630      | 58.400    |
|                  | 2018 | 2.010       | 46.700     | 86.150   | 46.940     | 60.800    |
|                  | 2019 | 1.650       | 76.100     | 79.200   | 78.480     | 63.200    |
|                  | 2020 | 1.990       | 48.700     | 76.000   | 90.390     | 68.300    |
|                  | 2021 | 2.100       | 84.000     | 81.500   | 75.880     | 67.600    |
| BUSIA            | 2017 | 0.680       | 17.600     | 76.060   | 89.810     | 49.500    |
|                  | 2018 | 1.620       | 68.700     | 79.890   | 97.000     | 50.600    |
|                  | 2019 | 1.590       | 69.000     | 78.200   | 61.540     | 58.700    |
|                  | 2020 | 1.020       | 63.900     | 68.660   | 48.650     | 67.900    |
|                  | 2021 | 0.940       | 84.700     | 82.120   | 42.770     | 58.400    |
| ELGEYO/M         |      |             |            |          |            |           |
| ARAKWET          | 2017 | 0.960       | 49.900     | 76.700   | 71.770     | 60.900    |
|                  | 2018 | 1.430       | 75.500     | 86.110   | 97.640     | 62.800    |
|                  | 2019 | 1.230       | 45.600     | 76.450   | 43.360     | 61.400    |
|                  | 2020 | 1.310       | 63.000     | 86.810   | 60.820     | 61.000    |
|                  | 2021 | 1.510       | 84.400     | 86.810   | 65.810     | 55.800    |
| EMBU             | 2017 | 1.060       | 12.200     | 80.770   | 25.560     | 56.800    |
|                  | 2018 | 1.390       | 39.500     | 82.340   | 53.620     | 59.400    |
|                  | 2019 | 1.820       | 40.100     | 81.640   | 62.860     | 62.000    |
|                  | 2020 | 1.590       | 81.400     | 80.660   | 51.790     | 70.000    |
|                  | 2021 | 1.060       | 100.300    | 88.060   | 63.680     | 69.500    |
| GARISSA          | 2017 | 0.350       | 31.000     | 80.090   | 23.840     | 55.200    |

## Appendix III: Research Data

|              | <b>X</b> 7 | D. f.              | Budgetary  | Revenue  | Local<br>revenue | Recurrent |
|--------------|------------|--------------------|------------|----------|------------------|-----------|
| County ID    | Year       | <b>Performance</b> | compliance | transfer | collection       | spending  |
|              | 2018       | 1.480              | 72.400     | 80.440   | 18.670           | 55.400    |
|              | 2019       | 0.690              | 78.800     | 78.920   | 21.190           | 62.900    |
|              | 2020       | 0.730              | 87.000     | 77.550   | 23.420           | 70.300    |
|              | 2021       | 0.530              | 96.300     | 87.710   | 34.680           | 60.800    |
| HOMABAY      | 2017       | 1.430              | 64.400     | 79.990   | 95.950           | 61.600    |
|              | 2018       | 1.890              | 101.200    | 90.670   | 102.720          | 63.300    |
|              | 2019       | 1.520              | 79.100     | 80.550   | 90.640           | 65.100    |
|              | 2020       | 1.230              | 75.900     | 89.660   | 75.000           | 66.700    |
|              | 2021       | 1.320              | 84.900     | 88.390   | 90.120           | 63.800    |
| ISIOLO       | 2017       | 0.160              | 51.000     | 83.120   | 34.740           | 59.400    |
|              | 2018       | 0.990              | 82.200     | 86.250   | 29.530           | 61.400    |
|              | 2019       | 0.320              | 76.800     | 82.310   | 30.590           | 51.600    |
|              | 2020       | 0.510              | 90.400     | 85.660   | 38.000           | 64.800    |
|              | 2021       | 0.210              | 85.100     | 90.490   | 62.650           | 66.800    |
| KAJIADO      | 2017       | 1.300              | 46.000     | 79.760   | 87.690           | 58.800    |
|              | 2018       | 1.390              | 50.200     | 80.830   | 81.940           | 60.500    |
|              | 2019       | 1.670              | 56.800     | 75.260   | 52.830           | 62.900    |
|              | 2020       | 1.290              | 3.810      | 78.920   | 44.630           | 61.800    |
|              | 2021       | 1.380              | 73.400     | 82.220   | 65.540           | 60.800    |
| KAKAMEG<br>A | 2017       | 1.680              | 27.700     | 80.900   | 11.560           | 52.200    |
|              | 2018       | 1.270              | 60.600     | 87.990   | 57.210           | 52.400    |
|              | 2019       | 2.010              | 72.400     | 90.500   | 50.420           | 60.900    |
|              | 2020       | 1.990              | 82.400     | 90.000   | 49.570           | 56.500    |
|              | 2021       | 2.210              | 97.300     | 81.610   | 56.880           | 52.900    |
| KERICHO      | 2017       | 1.540              | 54.000     | 88.810   | 109.660          | 59.500    |
|              | 2018       | 1.890              | 73.800     | 92.110   | 107.860          | 61.500    |
|              | 2019       | 3.450              | 78.100     | 89.010   | 98.730           | 60.900    |
|              | 2020       | 1.720              | 82.700     | 90.010   | 81.210           | 68.700    |
|              | 2021       | 1.690              | 88.000     | 89.270   | 74.650           | 56.700    |
| KIAMBU       | 2017       | 2.350              | 41.100     | 88.600   | 40.760           | 68.100    |
|              | 2018       | 2.690              | 66.700     | 90.270   | 64.690           | 72.300    |
|              | 2019       | 2.910              | 71.400     | 90.050   | 74.400           | 68.800    |
|              | 2020       | 2.720              | 69.900     | 88.990   | 66.220           | 78.000    |
|              | 2020       | 5.010              | 82.900     | 91.650   | 52.480           | 65.000    |
| KILIFI       | 2021       | 1.640              | 20.700     | 88.100   | 62.460           | 46.900    |
|              | 2017       | 2.220              | 64.900     | 90.460   | 54.550           | 48.400    |
|              | 2010       | 1.730              | 62.600     | 81.340   | 36.880           | 48.900    |
|              | 2017       | 1.680              | 65.500     | 89.230   | 39.100           | 64.800    |
|              | 2020       | 1.500              | 88.000     | 86.540   | 56.290           | 60.400    |
|              | 2021       | 1.500              | 00.000     | 00.340   | 50.290           | 00.400    |

| County ID | Year | Performance | Budgetary<br>compliance | Revenue<br>transfer | Local<br>revenue<br>collection | Recurrent spending |
|-----------|------|-------------|-------------------------|---------------------|--------------------------------|--------------------|
| KIRINYAG  |      |             | • • • • • •             | 00.440              | 4 <b>- - - - -</b>             | <b>10</b> 000      |
| Α         | 2017 | 1.470       | 34.000                  | 80.440              | 45.750                         | 63.900             |
|           | 2018 | 1.990       | 57.600                  | 88.130              | 73.770                         | 68.400             |
|           | 2019 | 1.890       | 70.500                  | 67.880              | 78.080                         | 63.900             |
|           | 2020 | 1.340       | 57.600                  | 86.130              | 43.140                         | 70.000             |
|           | 2021 | 1.250       | 99.500                  | 84.130              | 57.330                         | 69.400             |
| KISII     | 2017 | 1.400       | 55.000                  | 83.070              | 34.300                         | 57.300             |
|           | 2018 | 1.640       | 79.900                  | 81.240              | 47.110                         | 60.900             |
|           | 2019 | 5.230       | 70.600                  | 90.100              | 43.730                         | 61.200             |
|           | 2020 | 1.200       | 54.300                  | 93.230              | 37.470                         | 69.100             |
|           | 2021 | 1.910       | 100.600                 | 91.610              | 26.980                         | 66.700             |
| KISUMU    | 2017 | 2.120       | 4.000                   | 78.800              | 35.750                         | 58.100             |
|           | 2018 | 2.310       | 47.400                  | 80.910              | 64.730                         | 58.100             |
|           | 2019 | 2.560       | 45.300                  | 79.210              | 52.390                         | 67.400             |
|           | 2020 | 2.500       | 62.600                  | 78.660              | 63.350                         | 69.200             |
|           | 2021 | 2.650       | 65.900                  | 80.930              | 76.170                         | 61.200             |
| KITUI     | 2017 | 1.130       | 56.500                  | 78.110              | 35.760                         | 45.900             |
|           | 2018 | 1.210       | 58.300                  | 89.320              | 49.310                         | 46.400             |
|           | 2019 | 1.210       | 69.600                  | 80.200              | 68.430                         | 52.900             |
|           | 2020 | 0.990       | 70.700                  | 89.220              | 47.160                         | 59.500             |
|           | 2021 | 1.270       | 95.100                  | 84.120              | 57.860                         | 60.800             |
| KWALE     | 2017 | 1.330       | 56.900                  | 82.600              | 32.450                         | 34.800             |
|           | 2018 | 1.910       | 55.800                  | 85.240              | 50.790                         | 37.400             |
|           | 2019 | 2.000       | 68.400                  | 84.560              | 82.870                         | 48.600             |
|           | 2020 | 2.000       | 56.800                  | 83.200              | 84.660                         | 55.800             |
|           | 2021 | 1.020       | 102.400                 | 84.140              | 100.470                        | 46.900             |
| LAIKIPIA  | 2017 | 1.020       | 34.000                  | 85.510              | 62.300                         | 56.800             |
|           | 2018 | 1.890       | 53.900                  | 92.500              | 100.120                        | 58.200             |
|           | 2019 | 1.010       | 60.700                  | 88.260              | 94.230                         | 59.900             |
|           | 2020 | 1.210       | 62.700                  | 89.660              | 69.060                         | 66.900             |
|           | 2021 | 0.910       | 95.400                  | 90.160              | 82.670                         | 60.200             |
| LAMU      | 2017 | 0.490       | 24.000                  | 75.120              | 41.300                         | 53.700             |
| 24 11,10  | 2017 | 1.020       | 50.800                  | 88.230              | 93.810                         | 55.300             |
|           | 2018 | 0.930       | 64.400                  | 79.340              | 53.570                         | 62.100             |
|           | 2017 | 0.890       | 38.300                  | 89.220              | 76.960                         | 66.500             |
|           | 2020 | 0.370       | 81.000                  | 74.300              | 61.430                         | 49.300             |
| МАСНАКО   | 2021 | 0.570       | 01.000                  | 77.300              | 01.430                         | T7.300             |
| S         | 2017 | 0.770       | 64.500                  | 84.720              | 46.240                         | 56.200             |
|           | 2018 | 0.890       | 27.900                  | 92.330              | 47.600                         | 51.400             |
|           | 2019 | 2.690       | 44.600                  | 82.590              | 47.300                         | 69.000             |

| County ID | Year | Performance | Budgetary<br>compliance | Revenue<br>transfer | Local<br>revenue<br>collection | <b>Recurrent</b> spending |
|-----------|------|-------------|-------------------------|---------------------|--------------------------------|---------------------------|
|           | 2020 | 2.500       | 99.100                  | 82.000              | 44.010                         | 69.600                    |
|           | 2021 | 2.950       | 66.100                  | 88.040              | 66.720                         | 64.500                    |
| MAKUENI   | 2017 | 1.630       | 30.700                  | 82.000              | 54.050                         | 48.000                    |
|           | 2018 | 2.890       | 37.300                  | 89.430              | 93.630                         | 49.800                    |
|           | 2019 | 3.220       | 31.700                  | 90.660              | 53.290                         | 48.800                    |
|           | 2020 | 2.690       | 73.400                  | 90.230              | 65.530                         | 63.500                    |
|           | 2021 | 1.300       | 69.700                  | 80.900              | 53.210                         | 58.700                    |
| MANDERA   | 2017 | 0.780       | 23.700                  | 83.660              | 20.590                         | 36.400                    |
|           | 2018 | 1.890       | 88.300                  | 89.410              | 34.910                         | 36.700                    |
|           | 2019 | 0.780       | 74.800                  | 85.990              | 44.290                         | 39.800                    |
|           | 2020 | 0.550       | 80.600                  | 89.230              | 21.020                         | 52.800                    |
|           | 2021 | 0.460       | 106.700                 | 90.990              | 26.760                         | 48.400                    |
| MARSABIT  | 2017 | 0.190       | 34.600                  | 84.160              | 104.620                        | 49.900                    |
|           | 2018 | 0.550       | 63.800                  | 88.990              | 204.770                        | 51.000                    |
|           | 2019 | 0.890       | 72.700                  | 82.200              | 86.110                         | 57.300                    |
|           | 2020 | 0.620       | 86.900                  | 74.540              | 107.280                        | 55.600                    |
|           | 2021 | 0.430       | 95.300                  | 84.000              | 64.150                         | 52.900                    |
| MERU      | 2017 | 1.730       | 19.700                  | 80.380              | 52.250                         | 63.100                    |
|           | 2018 | 2.100       | 67.500                  | 93.140              | 91.700                         | 65.600                    |
|           | 2019 | 1.930       | 58.800                  | 89.340              | 92.110                         | 68.300                    |
|           | 2020 | 2.010       | 69.600                  | 91.210              | 71.470                         | 70.000                    |
|           | 2021 | 2.680       | 50.300                  | 81.770              | 53.750                         | 63.800                    |
| MIGORI    | 2017 | 1.310       | 61.000                  | 85.100              | 30.000                         | 55.200                    |
|           | 2018 | 1.750       | 65.400                  | 89.000              | 71.020                         | 55.700                    |
|           | 2019 | 0.990       | 66.700                  | 80.210              | 84.840                         | 61.600                    |
|           | 2020 | 2.120       | 62.800                  | 93.910              | 69.240                         | 67.000                    |
|           | 2021 | 1.140       | 79.500                  | 84.170              | 111.130                        | 58.500                    |
| MOMBASA   | 2017 | 3.210       | 2.400                   | 88.060              | 33.820                         | 65.900                    |
|           | 2018 | 3.110       | 65.700                  | 87.250              | 48.670                         | 69.900                    |
|           | 2019 | 2.990       | 82.400                  | 67.990              | 72.650                         | 66.300                    |
|           | 2020 | 3.250       | 68.800                  | 94.230              | 59.860                         | 69.900                    |
|           | 2021 | 4.250       | 100.500                 | 92.350              | 87.800                         | 70.000                    |
| MURANG'A  | 2017 | 2.060       | 51.300                  | 68.310              | 52.500                         | 49.400                    |
|           | 2018 | 3.120       | 75.300                  | 88.790              | 70.280                         | 51.400                    |
|           | 2019 | 1.960       | 81.100                  | 79.210              | 72.650                         | 59.900                    |
|           | 2020 | 2.790       | 58.100                  | 92.310              | 51.000                         | 63.800                    |
|           | 2021 | 2.070       | 101.900                 | 91.470              | 53.380                         | 59.600                    |
| NAIROBI   | 2017 | 3.960       | 25.000                  | 84.200              | 64.900                         | 67.100                    |
|           | 2018 | 4.200       | 33.500                  | 100.000             | 86.310                         | 72.900                    |
|           | 2019 | 4.990       | 52.900                  | 87.430              | 76.590                         | 68.300                    |

| County ID | Year | Performance | Budgetary<br>compliance | Revenue<br>transfer | Local<br>revenue<br>collection | <b>Recurrent</b> spending |
|-----------|------|-------------|-------------------------|---------------------|--------------------------------|---------------------------|
|           | 2020 | 13.820      | 33.400                  | 100.000             | 55.860                         | 75.100                    |
|           | 2021 | 19.770      | 178.500                 | 127.610             | 58.680                         | 77.600                    |
| NAKURU    | 2017 | 4.890       | 16.500                  | 80.060              | 59.040                         | 61.100                    |
|           | 2018 | 4.260       | 43.200                  | 90.010              | 79.840                         | 61.500                    |
|           | 2019 | 2.230       | 41.400                  | 88.810              | 99.270                         | 61.300                    |
|           | 2020 | 4.230       | 35.100                  | 92.330              | 59.610                         | 62.000                    |
|           | 2021 | 5.580       | 105.400                 | 81.760              | 91.150                         | 56.000                    |
| NANDI     | 2017 | 1.880       | 44.400                  | 83.000              | 30.900                         | 51.900                    |
|           | 2018 | 2.890       | 99.900                  | 89.230              | 65.350                         | 55.200                    |
|           | 2019 | 1.430       | 77.300                  | 88.230              | 66.190                         | 63.400                    |
|           | 2020 | 1.550       | 71.400                  | 89.230              | 67.550                         | 68.500                    |
|           | 2021 | 1.450       | 72.800                  | 86.910              | 51.340                         | 61.900                    |
| NAROK     | 2017 | 1.680       | 22.000                  | 90.110              | 41.590                         | 61.400                    |
|           | 2018 | 1.850       | 78.500                  | 90.510              | 48.700                         | 67.300                    |
|           | 2019 | 1.990       | 77.600                  | 90.580              | 74.780                         | 59.300                    |
|           | 2020 | 1.920       | 63.300                  | 90.510              | 53.050                         | 66.400                    |
|           | 2021 | 2.040       | 99.900                  | 90.630              | 88.120                         | 69.500                    |
| NYAMIRA   | 2017 | 1.260       | 44.000                  | 81.710              | 94.030                         | 58.100                    |
|           | 2018 | 1.790       | 65.200                  | 83.450              | 47.590                         | 56.500                    |
|           | 2019 | 1.550       | 54.500                  | 87.230              | 44.400                         | 70.100                    |
|           | 2020 | 1.350       | 58.600                  | 89.230              | 47.380                         | 68.800                    |
|           | 2021 | 1.240       | 62.300                  | 85.380              | 38.170                         | 70.000                    |
| NYANDAR   |      |             |                         |                     |                                |                           |
| UA        | 2017 | 1.990       | 55.000                  | 83.990              | 79.560                         | 60.700                    |
|           | 2018 | 1.320       | 70.500                  | 93.000              | 120.310                        | 61.500                    |
|           | 2019 | 2.400       | 77.800                  | 84.180              | 71.230                         | 64.200                    |
|           | 2020 | 2.390       | 84.400                  | 97.100              | 76.090                         | 66.800                    |
|           | 2021 | 2.380       | 86.200                  | 89.730              | 85.870                         | 66.800                    |
| NYERI     | 2017 | 1.510       | 64.000                  | 90.110              | 90.230                         | 67.300                    |
|           | 2018 | 1.520       | 68.200                  | 90.130              | 50.650                         | 70.400                    |
|           | 2019 | 1.800       | 62.500                  | 85.230              | 65.580                         | 65.100                    |
|           | 2020 | 1.250       | 53.000                  | 89.230              | 58.730                         | 68.700                    |
|           | 2021 | 1.970       | 57.500                  | 88.230              | 76.020                         | 68.700                    |
| SAMBURU   | 2017 | 0.260       | 59.500                  | 84.840              | 89.910                         | 59.500                    |
|           | 2018 | 1.250       | 78.200                  | 89.320              | 48.140                         | 60.200                    |
|           | 2019 | 1.700       | 65.100                  | 83.240              | 46.790                         | 64.200                    |
|           | 2020 | 0.520       | 86.400                  | 87.100              | 54.260                         | 69.900                    |
|           | 2021 | 0.310       | 94.300                  | 87.730              | 85.410                         | 69.900                    |
| SIAYA     | 2017 | 1.300       | 29.000                  | 79.110              | 65.210                         | 51.600                    |
|           | 2018 | 1.610       | 60.000                  | 89.110              | 47.530                         | 53.600                    |

| County ID        | Year | Performance | Budgetary<br>compliance | Revenue<br>transfer | Local<br>revenue<br>collection | <b>Recurrent</b> spending |
|------------------|------|-------------|-------------------------|---------------------|--------------------------------|---------------------------|
|                  | 2019 | 1.590       | 57.000                  | 89.000              | 37.260                         | 54.400                    |
|                  | 2017 | 1.660       | 62.900                  | 70.230              | 64.010                         | 63.000                    |
|                  | 2020 | 1.060       | 65.000                  | 75.880              | 51.610                         | 63.000                    |
| TAITA/TAV        | 2021 | 1.000       | 05.000                  | 75.000              | 51.010                         | 03.000                    |
| ETA              | 2017 | 0.510       | 48.000                  | 79.370              | 51.970                         | 69.300                    |
|                  | 2018 | 0.910       | 71.800                  | 79.290              | 41.510                         | 70.400                    |
|                  | 2019 | 0.980       | 41.100                  | 84.550              | 48.970                         | 67.800                    |
|                  | 2020 | 0.920       | 28.600                  | 86.220              | 48.380                         | 70.500                    |
|                  | 2021 | 0.620       | 36.800                  | 82.890              | 48.590                         | 70.500                    |
| TANA             |      |             |                         |                     |                                |                           |
| RIVER            | 2017 | 1.110       | 3.000                   | 75.820              | 36.150                         | 38.100                    |
|                  | 2018 | 1.720       | 38.400                  | 79.790              | 27.530                         | 38.700                    |
|                  | 2019 | 0.890       | 80.400                  | 77.000              | 23.670                         | 52.400                    |
|                  | 2020 | 0.750       | 75.500                  | 75.200              | 45.700                         | 57.500                    |
|                  | 2021 | 0.450       | 100.000                 | 64.810              | 188.750                        | 57.500                    |
| THARAKA<br>NITHI | 2017 | 0.710       | 54.000                  | 79.560              | 101.630                        | 57.100                    |
|                  | 2018 | 0.700       | 45.800                  | 85.240              | 46.290                         | 60.000                    |
|                  | 2019 | 0.890       | 51.400                  | 82.200              | 56.090                         | 68.700                    |
|                  | 2020 | 0.880       | 42.900                  | 66.230              | 39.270                         | 65.500                    |
|                  | 2021 | 0.760       | 116.100                 | 80.820              | 70.370                         | 65.500                    |
| TRANS            |      |             |                         |                     |                                |                           |
| NZOIA            | 2017 | 1.320       | 74.000                  | 88.410              | 40.210                         | 49.900                    |
|                  | 2018 | 1.670       | 53.500                  | 89.740              | 78.250                         | 52.800                    |
|                  | 2019 | 1.890       | 61.500                  | 80.140              | 93.820                         | 61.800                    |
|                  | 2020 | 1.590       | 64.600                  | 82.310              | 43.580                         | 69.900                    |
|                  | 2021 | 1.510       | 89.700                  | 82.600              | 61.520                         | 69.900                    |
| TURKANA          | 2017 | 0.960       | 48.000                  | 80.050              | 53.150                         | 34.800                    |
|                  | 2018 | 1.250       | 58.900                  | 88.890              | 115.020                        | 36.700                    |
|                  | 2019 | 1.870       | 66.300                  | 92.000              | 67.010                         | 38.200                    |
|                  | 2020 | 1.890       | 69.400                  | 91.200              | 103.510                        | 62.000                    |
|                  | 2021 | 1.050       | 97.400                  | 78.100              | 71.950                         | 62.000                    |
| UASIN<br>GISHU   | 2017 | 2.200       | 13.000                  | 80.240              | 68.620                         | 63.300                    |
|                  | 2018 | 2.030       | 69.300                  | 86.210              | 89.980                         | 60.900                    |
|                  | 2019 | 2.140       | 75.200                  | 82.140              | 69.320                         | 65.700                    |
|                  | 2020 | 2.130       | 54.600                  | 85.210              | 55.690                         | 62.300                    |
|                  | 2021 | 2.130       | 100.600                 | 80.360              | 96.380                         | 62.300                    |
| VIHIGA           | 2017 | 1.620       | 32.000                  | 73.990              | 60.360                         | 64.000                    |
|                  | 2018 | 2.220       | 57.200                  | 87.340              | 30.690                         | 61.000                    |
|                  | 2019 | 0.950       | 59.100                  | 79.630              | 39.450                         | 65.700                    |

| County ID | Year | Performance | Budgetary<br>compliance | Revenue<br>transfer | Local<br>revenue<br>collection | Recurrent spending |
|-----------|------|-------------|-------------------------|---------------------|--------------------------------|--------------------|
|           | 2020 | 0.960       | 52.500                  | 79.590              | 43.650                         | 62.300             |
|           | 2021 | 0.720       | 76.600                  | 75.150              | 65.240                         | 62.300             |
| WAJIR     | 2017 | 1.680       | 78.200                  | 78.330              | 51.270                         | 59.400             |
|           | 2018 | 2.490       | 89.300                  | 79.770              | 102.480                        | 61.000             |
|           | 2019 | 0.610       | 85.100                  | 75.230              | 54.520                         | 69.600             |
|           | 2020 | 2.330       | 90.100                  | 60.880              | 32.990                         | 69.600             |
|           | 2021 | 0.490       | 86.200                  | 90.340              | 45.070                         | 69.600             |
| WEST      |      |             |                         |                     |                                |                    |
| РОКОТ     | 2017 | 2.600       | 60.000                  | 75.890              | 154.970                        | 47.700             |
|           | 2018 | 4.790       | 91.800                  | 81.330              | 108.010                        | 46.000             |
|           | 2019 | 0.760       | 79.500                  | 87.670              | 55.440                         | 54.400             |
|           | 2020 | 0.860       | 85.500                  | 78.860              | 68.070                         | 60.800             |
|           | 2021 | 0.600       | 84.800                  | 92.580              | 79.470                         | 60.800             |