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EFFECT OF COUNTIES BUDGETARY ALLOCATIONS ON GROSS COUNTY PRODUCT IN KENYA

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Abstract: The economic pillar of Kenya Vision 2030 aims at maintaining a sustained economic growth of 10% p.a. The average growth between the year 2013 and the year 2017 was 5.6 % compared to 4.7% growth rate between the year 2008 and 2012. This paints a picture that the economic performance in the country is way below the Vision 2030 intended target. Although devolution was intended to catalyze economic growth, the target has not been realized yet. In spite of increased budget allocation to county government functions over the period, counties contribution to Gross Domestic Product (GDP) in Kenya was volatile across counties during the years 2014 to 2017. On average, during the year 2013 to 2017 counties contributed 2.1% to the GDP growth in Kenya. This contribution is coupled with a 3.2 standard deviation. The deviation shows a big heterogeneity among counties as far as budgetary allocation is concerned.

Objective: The general objective of the study was to investigate the effect of counties budgetary allocation on Gross County Product in Kenya.

Findings: The findings showed that budgetary allocation to Agriculture had a significant positive effect on gross county product. In addition, it showed a significant positive effect of budgetary allocation to Natural Resources on gross county product. The findings also indicated that the effect budgetary allocation to Infrastructure and Trade Promotion on gross county product were not significant. The county governments in Kenya should focus on enhancing budgetary allocations to Agriculture and Natural Resources. It should also evaluate allocation to Infrastructure to make sure that these allocation target growth enhancing projects.

Keywords: Budgetary Allocations, Gross County Product, Trade Promotion, Infrastructure Sector

1. Background of the Study

Kenya Vision 2030 is a long term development plan giving a roadmap of what the country would like to achieve by the year 2030. The main aim of the vision is to make the country an industrializing middle income economy with high standards of living among its citizens. Devolution entails decentralization of administrative powers, politics and financial resources. It is geared towards addressing inequalities and regional disparities by transferring resources and powers over the transferred resources and decision making to the devolved units of government. The constitution further gives powers to the decentralized governments to legislate on county matters.

County governments started operations in the month of March 2013 after the elections that were held in that month. In the financial year 2013/2014, counties prepared their first budgets that were effective from July 2013. County Governments have since then budgeted for devolved functions through their resource envelope.

The Constitution defines County Governments' funding sources to include: Equitable Share, Conditional & Unconditional Grants, Equalization Fund, Own Source Revenue and Loans.

A budget is defined as a financial plan for a government or an enterprise in a given period of time that is prepared and submitted to a representative body which has to approve and authorize for the plan to be implemented (Cleveland, 1915). A budget gives an elaborate description of projected revenue and expected expenditure coupled with activities scheduled for achieving specified goals in a particular period. The main purpose of the budget is to accomplish the objectives stated in the programs in a given period of time with estimated resources and those available with a comparison of past periods and projection of what may be required in future (Smith and Lynch, 2004). The big question in budgetary allocation according to Key (1940) is on the reason for allocating an activity say X a given amount of resources instead of another activity say Y. An economist may view budget allocation in the lens of opportunity cost in which allocation of resources to one activity takes away resources from another activity. The economist's role, therefore, is to give useful information to policy makers on the best choices to make.

Budgeting plays a key role in planning, monitoring and evaluating the deliverables of any government. Budgeting in public sector have the legal, economic and political functions to play. The economic function of the budget is attained through the plan, control and administration of activities with an intention to harmonize projected revenue and the planned expenditure while allocating the resources in an efficient manner to derive maximum utility and social welfare. The budget specifies the activities to be undertaken and how the required resources will be acquired and allocated. It further helps authorities monitor if revenue and expenditure flow during implementation period are as planned and make necessary adjustments in time. At the close of a financial period, budgets can be compared with final accounts reports to evaluate whether the revenue and expenditure flows were as expected or not. Since budgets can be linked to the objectives of subnational governments, it can be used to assess the efficiency of service delivery.

The principal objective of the public sector budget is the attainment of an improved welfare among its population. Budgets act as a requisite tool to check governments since the services and the goods they offer compared to those offered by the private entities and businesses are not affected by the market forces. Public budgets can be broadly categorized under recurrent and capital budgets. Recurrent budgets are used to finance day to day operations while capital budgets finance acquisition of assets like equipment, land and infrastructure. In a number of countries, there is a requirement recurrent budget of maintaining a balance budget. However, since capital budgets are intended for creation and acquisition of assets that have returns over a number of years, there is a suggestion that their funding should not be pegged on the taxes expected in that financial year only but through borrowing from external sources. Consequently, a number of key government projects like highways can be financed by tying expenditure to specific sources of revenue.

Decentralized government budget serves a purpose of linking community needs to the resources required to satisfy those needs. It serves as a guide for managing local finances and citizens can use it as a tool to evaluate performance of the government and a measure of financial discipline. Local governments can effectively budget if they have autonomy over revenue and expenditure. The discretion over funds is highly pegged on the extent of fiscal, political and administrative decentralization (Mullins, 2007). In developing countries, budgeting presents myriad of challenges. One of the challenges that affect revenue is the difficulty of enhancing own source finances. The other challenge facing expenditure is that a majority of budgets are largely recurrent in nature. Good governance and accountability through budgeting can play a fundamental role in sustaining efficiency of local services.

The era of devolution in Kenya has led to development planning that is tailored to the counties which heavily rely on county related data. Prior to the year 2013, contribution of the counties to economic growth in Kenya could not be easily established. The bureau of statistics in Kenya has since come up with a framework for incorporating county growth rates and the contribution of various sectors in the system of national accounts make annual estimates available. Variables that were used to develop distribution keys include population, employment, output, salaries and wages with additional analysis on Agricultural, Industry, Manufacturing and Services sectors. The main purpose of the Gross County Product (GCP) estimates is to shed light on the relative size and structure of the economy for every county in Kenya. The estimates make a great contribution to economic growth information and support county economic planning and decision making (KNBS, 2019).

The economic pillar of Vision 2030 aims at maintaining a sustained economic growth of 10 % p.a. The economic growth rates in Kenya averaged at 5.6 % between the year 2013 and 2017 compared to a growth rate average of 4.7 % between the year 2008 and 2012. The review shows that the vision 2030 economic growth target is still farfetched. The challenges faced in the implementation of devolution like resource leakages, duplication of mandates between the county and the national government, low absorption rates can be attributed to low economic growth rates (Treasury, 2018). Despite the amount of resources allocated to the functions of the county governments in Kenya increasing over time, growth was erratic across the counties in the years 2014 to 2017. The counties contributed an average of 2.1 per cent each to the GDP growth during the years 2013 to 2017 with standard deviation at 3.2 (KNBS, 2019). For the country to realize its economic growth targets, contribution of the counties to the national output is a field that needs a clear focus.

Despite having a small contribution to the national economy, some counties show a high potential with faster growth rate in the period under review. They also show a possibility of catching up with the larger contributors. A county like Elgeyo Marakwet for example, had its share of GCP increase from 1.3 in 2013 to 2.1 in 2017 while Nairobi County had it share decrease from 23.5 to 19.8 over the same period. Seventeen counties experienced faster growth in their real gross county product compared to the average growth rates of all the counties. A number of counties recorded a double digit growth at some point during the same period while others experienced a reduction in their economic activities. This highlights huge differences across the counties and at the same time hoists opportunity that devolution brings to table in tackling the same (KNBS, 2019). If these disparities are bridged, Kenya is likely to meet the main expected outcomes of devolution which include; equal distribution of resources, increase in the creation of goods and services, increased employment, public participation and development of marginalized regions (Ntara, 2013).

2. Statement of the problem

Notable disparities can be seen in the counties contribution to the growth of the Kenyan economy (KNBS, 2019). Counties contributed an average of 2.1 per cent each to the GDP in the years 2013 to 2017 with standard deviation of 3.2. This difference can be seen in the contribution of various sub sectors too. A good number of counties have prospective in services and agriculture sectors while others like Machakos, Kisumu and Isiolo are low in agriculture. Manufacturing activities which play a key role in the industrial subsector are majorly concerted in the urban areas.

Minimal research has been done on budgetary practices in developing countries. Most of the research in this area has focused on the developed countries (William, 1999). Studies done in Kenya include; (Mutuma, 2016) studied the challenges of the execution of the budget in public sector, a case of the county government of Meru, Mbindyo (2010) explored the challenges faced in the implementation of the local authorities budgets in Kenya, a case of municipal council of Thika, Mugwe (2010) examined the challenges of budgeting in Kenya, a case

of the Ministries in the Kenyan Government, Muriuki (2007) studied the effectiveness of cash budgeting in public institutions, while Biwott (1987) did a study on the budgetary allocation process in public sector institutions, a case of University of Nairobi. The literature on budget practices focuses mainly on the processes, effectiveness and challenges in budget execution in public sector. None has linked the effect of budgetary allocation on economic growth. Furthermore, to the best of the researcher's knowledge, no previous study has been done on the effect of budgetary allocation on counties contribution to growth of the Kenyan economy.

The study will investigate the effect of budgetary allocation on counties Gross County Product in Kenya. Contrary to previous studies that were mainly descriptive, this study will be causal and will cover all the 47 counties in Kenya. It will address the causes of disparities in counties GCP in Kenya as far as budgetary allocation is concerned. It will focus on allocations to key sectors that drive both the county and national economies.

3. Objectives

The key objective of this study was to investigate the effect of counties budgetary allocation on Gross County Product in Kenya. The specific objectives were to:

- i) assess the effect of the budget allocated to Agriculture on Gross County Product.
- ii) determine the effect of the budget allocated to the Infrastructure on Gross County Product.
- iii) examine the effect of the budget allocated to Trade Promotion on Gross County Product.
- iv) evaluate the effect of the budget allocated to Natural Resources on Gross County Product

4. Methodology

The study used an explanatory research design. It was done in Kenya and by the use of census approach with the entire population being the 47 counties in the country. Document analysis approach was used to collect data. The study utilized panel data from the year 2014 to 2017. Secondary data was extracted from economic survey reports, statistical abstracts and gross county product report for the years 2013 to 2017. The study used both descriptive and inferential research designs to establish any existing relationship between the dependent variable, Gross County Product (GCP) and the independent variables; budgetary allocation to agriculture, infrastructure, trade promotion and natural resources. On descriptive analysis the study made use of mean, frequency, standard deviation, percentages as well as distribution. Under inferential analysis the study focused on multiple linear regression analysis, analysis of variance as well as correlation analysis.

5. Research Findings and Discussion

Descriptive Statistics

Descriptive statistics results were used in describing the basic features of data by providing simple summaries about the dependent and independent variables adopted in the study. Descriptive statistics summarizes information about a given sample in a study. The descriptive statistics estimated in this study include: mean, maximum, minimum and standard deviation of data collected. This was conducted on all the variables i.e. Gross County Product, budgetary allocation to Agriculture, budgetary allocation to Infrastructure, budgetary allocation to Trade Promotion and budgetary allocation to Natural Resources. Table 1 below shows the descriptive statistics for our study variables.

Table 1: Descriptive Statistics

| Variable | Observations | Mean | Standard Deviation | Min | Max |
|--|--------------|-----------|--------------------|----------|------------|
| County | 188 | 24 | 13.60088 | 1 | 47 |
| Year | 188 | 2015.5 | 1.121019 | 2014 | 2017 |
| Gross County Product | 188 | 78,618.12 | 131,630.00 | 8,045.00 | 998,160.00 |
| Budgetary allocation to Agriculture | 188 | 465.06 | 266.31 | 85.97 | 2,069.52 |
| Budgetary Allocation to Infrastructure | 188 | 1,089.09 | 931.73 | 212.88 | 7,908.00 |
| Budgetary Allocation to Trade Promotion | 188 | 253.60 | 177.23 | 26.36 | 1,163.79 |
| Budgetary Allocation to Natural Resources | 188 | 399.44 | 426.64 | 18.00 | 2,832.00 |

From Table 1 above, the average Gross County Product was Kshs. 78,618.12 Million with a minimum of Kshs. 8,045.00 Million and a maximum of Kshs. 998,160.00 Million. The standard deviation was Kshs. 131,630.00 Million. It also shows that counties allocated an average budget of Kshs. 465.06 Million to Agriculture with the least allocating Kshs. 85.97 Million and the highest allocating Kshs. 2,069.52 Million. The standard deviation is Kshs. 266.31 Million. Counties allocated an average budget of Kshs. 1,089.09 Million to Infrastructure with the least allocating Kshs. 212.98 Million and the highest allocating Kshs. 7,908.00 Million. The standard deviation is Kshs. 931.73 Million. An average amount of Kshs. 1,163.79 Million. The standard deviation is Kshs. 177.23 Million. Natural Resources received and average allocation of Kshs. 399.44 Million with a minimum of Kshs. 18.00 Million and a maximum of Kshs. 2,832.00 Million. The standard deviation is Kshs. 18.00 Million and a maximum of Kshs. 2,832.00 Million.

6. Inferential Statistics Results

Correlation Analysis

Correlation measures the strength of the association between the study variables. The analysis helps in establishing the degree of the linear relationship between two variables and ranges between +1 and -1. The researcher conducted a correlation analysis on all the dependent and independent variables in STATA and the outcome is shown in Table 2 below.

| | Gross County Product | Budgetary allocation to Agriculture | Budgetary Allocation to Infrastructure | Budgetary Allocation to Trade Promotion | Budgetary Allocation to Natural Resources |
|--|----------------------------|---|--|--|--|
| Gross County Product | 1 | | | | |
| Budgetary allocation to Agriculture | 0.0198 | 1 | | | |
| Budgetary Allocation to Infrastructure | 0.8068 | 0.2 | 1 | | |
| Budgetary Allocation to Trade Promotion | 0.5301 | 0.4725 | 0.6138 | 1 | |
| Budgetary Allocation to Natural Resources | 0.5861 | 0.1603 | 0.6724 | 0.551 | 1 |

 Table 2: Pearson Correlation Matrix

Pearson Correlation Matrix

Table 2 shows the correlation co-efficient between the dependent variable; Gross County Product and the independent variables; budgetary allocation to Agriculture, budgetary allocation to Infrastructure, budgetary allocation to Trade Promotion and budgetary allocation to Natural Resources. A positive value shows that the variables are positively related while a negative value shows that the variables are negatively related. There was a positive relationship between Gross County Product and budgetary allocation to Agriculture, Infrastructure, Trade Promotion and Natural Resources suggesting that an increase in one variable correspond to an increase in the other variable. The positive relationship among all independent variables can be explained by the increase in budgetary allocations among county entities.

Budgetary Allocation to Agriculture

Figure 1 below shows the correlation plot between Gross County Product and the county budgets allocated to Agriculture. There was a weak positive correlation of +0.0198 between the two variables.



Figure 1: Scatter Plot for Budgetary Allocation to Agriculture and GCP

Budgetary Allocation to Infrastructure

Figure 2 in the next page shows the correlation plot between Gross County Product and the county budgets allocated to Infrastructure. There was a strong positive correlation of +0.8068 between the two variables.



Figure 2: Scatter Plot for Budgetary Allocation to Infrastructure and GCP

Budgetary Allocation to Trade Promotion

Figure 3 below shows the correlation plot between Gross County Product and the county budgets allocated to Trade Promotion. There was a positive correlation of +0.5301 between the two variables.



Figure 3: Scatter Plot for Budgetary Allocation to Trade Promotion and GCP

Budgetary Allocation to Natural Resources

Figure 4 below shows the correlation plot between Gross County Product and the county budgets allocated to Natural Resources. There was a positive correlation of +0.5861 between the two variables.



Figure 4: Scatter Plot for Budgetary Allocation to Natural Resources and GCP

Multiple Linear Regression Analysis

Multiple linear regression was used in analyzing the relationship between Counties Budgetary Allocations and the Gross County Product (GCP).

Breusch-Pagan Lagrangian Multiplier (LM) Test

The Breusch-Pagan Lagrangian Multiplier (LM) Test was done to determine if panel data is appropriate. The null hypothesis in the LM test is that the variance across entities is zero. That is, there is no significant differences across units (i.e. no panel effect). Table 3 below shows the results of the LM test. From the table, the P-value is significant which rejects the null hypothesis. This means that there is a panel effect.

| Table | 3: | LM | Test |
|-------|-----|----|------|
| 10000 | ••• | | 1000 |

| Breusch and Pagan Lagrangian multiplier test for random effects GCP Cont [County, t] = Xb + u[County] + e[County, t] | | | | | |
|---|------------------|----------------|--|--|--|
| Estimated results: | | | | | |
| | Var | sd = sqrt(Var) | | | |
| Gross County Product | 1.73E+10 | 131630 | | | |
| e | 1.17E+08 | 10806.5 | | | |
| u | 2.87E+09 | 53562.84 | | | |
| Test: $Var(u) = 0$ | | | | | |
| | chibar2(01) = | 75.27 | | | |
| | Prob > chibar2 = | 0.0000 | | | |

Random Effects Model

The results of the random effects model are as presented in Table 4 below. The R-squared within, between and overall were 0.0012, 0.0006 and 0.0003 respectively.

| Random-effects GLS regres | Number of obs = | 188 | | | | |
|---------------------------|-----------------|-------------------------------------|------|------|----------------------|----------|
| Group variable: County | | | | | Number of groups = | 47 |
| R-sq: | within = | 0.0012 | | | Obs per group: min = | 4 |
| | between = | 0.0006 | | | avg = | 4 |
| | overall = | 0.0003 | | | max = | 4 |
| | | | | | Wald $chi2(4) =$ | 0.15 |
| $corr(u_i, X) =$ | 0 (assumed) | | | | Prob > chi2 = | 0.9972 |
| Gross County Product | Coef. | Std. Err. | Z | P>z | [95% Conf. Interval] | |
| Contribution | | | | | | |
| Budgetary allocation to | -0.0021264 | 0.010327 | -0.2 | 0.84 | -0.0223666 | 0.018114 |
| Agriculture | | | | | | |
| Budgetary Allocation to | -0.000252 | 0.004185 | -0.1 | 0.95 | -0.0084536 | 0.00795 |
| Infrastructure | | | | | | |
| Budgetary Allocation to | -0.0028079 | 0.012575 | -0.2 | 0.82 | -0.02274535 | 0.021838 |
| Trade Promotion | 0.0005706 | 0.002124 | 0.10 | 0.95 | 0.0055426 | 0.006702 |
| Development Expenditure | 0.0005796 | 0.003124 | 0.19 | 0.85 | -0.0055450 | 0.006703 |
| Development Expenditure | | | | | | |
| | 0.0012292 | 0.00425 | 4.01 | 0 | 0.0120110 | 0.020965 |
| _cons | 0.0213382 | 0.00435 | 4.91 | 0 | 0.0128119 | 0.029865 |
| sigma_u | 0.0269972 | | | | | |
| sigma_e | 0.0022584 | | | | | |
| rho | 0.9930507 | 7 (fraction of variance due to u_i) | | | | |

Table 4: Random Effects Model

Fixed Effects Model

The results of the fixed effects model are as presented in Table 5 below. The R-squared within, between and overall were 0.1898, 0.2833 and 0.2512 respectively.

Table 5: Fixed Effects Model Fixed-effects (within) regression Number of obs = 188Number of 47 Group variable: County groups = Obs per group: R-sq: within = 0.1898 4 min =between = 0.2833 avg =4 overall = 0.2512 max = 4 F(4,137) =8.02 Prob > F =0.0000 $corr(u_i, Xb) =$ 0.4334

| Gross County Product | Coef. | Std. Err. | t | P>t | [95% Conf. Interv | al] |
|---|----------------|-----------------------------------|--------|-------|-------------------|----------|
| Budgetary allocation to Agriculture | 16.85183 | 6.801237 | 2.48 | 0.014 | 3.402849 | 30.3008 |
| Budgetary Allocation to Infrastructure | - 0.0146494 | 2.079344 | -0.01 | 0.994 | -4.126408 | 4.09711 |
| Budgetary Allocation to Trade Promotion | -4.498472 | 7.928653 | -0.57 | 0.571 | -20.17684 | 11.17989 |
| Budgetary Allocation to Natural Resources | 24.1857 | 4.595659 | 5.26 | 0.000 | 15.0981 | 33.2733 |
| _cons | 62277.11 | 4211.658 | 14.79 | 0.000 | 53948.85 | 70605.38 |
| sigma_u | 126995.18 | | | | | |
| sigma_e | 10806.499 | | | | | |
| rho | 0.9928111 | (fraction of variance due to u_i) | | | | |
| F test that all $u_i =$ | 0 | F(46, 137) = | 185.11 | | Prob > F = | 0.0000 |

Hausman Test

Hausman test is a statistical test to select whether Fixed Effect or Random Effect model is the most appropriate to be is used. The H_0 supports that Random Effect Model is consistent while the H_a is that Fixed Effects Model is consistent. If the P value is greater than 0.05 we accept the null hypothesis and if the P value is less than 0.05 we reject the null hypothesis. From Table 6 below, the P value = 0.0000 which is less than 0.05 hence we reject the null hypothesis. The Fixed Effects Model is preferred.

Table 6: Hausman Test

| Coefficients | | | | | | | |
|---------------------------------|-----------|---------|------------|--------------------------------|--|--|--|
| | (b) | (B) | (b-B) | <pre>sqrt(diag(V_b-V_B))</pre> | | | |
| | FE | RE | Difference | S.E. | | | |
| + | | | | | | | |
| Allocation to Agriculture | 16.85183 | 15.1124 | 1.739423 | 1.810987 | | | |
| Allocation to Infrastructure | -0.014649 | 5.5673 | -5.581951 | 0.5980884 | | | |
| Allocation to Trade Promotion | -4.498472 | -0.3372 | -4.161242 | 0.8522409 | | | |
| Allocation to Natural Resources | 24.1857 | 31.1207 | -6.934945 | 1.332578 | | | |
| | ' | | | | | | |

b = consistent under Ho and Ha; obtained from xtreg

B = inconsistent under H_a, efficient under H_o; obtained from xtreg

Test: Ho: difference in coefficients not systematic

 $chi2(4) = (b-B)'[(V_b-V_B)^{(-1)}](b-B)$

= 96.96 Prob>chi2 = 0.0000

Multiple Linear Regression Model

Table 7 next page gives a summary of the results of the linear multiple regression model. The R-squared Within, Between and Overall were 0.1898, 0.2833 and 0.2512 respectively. Since it is a Fixed-effects (within) regression we will use the Within R-squared of 0.2833. This implies that 28.33% of the variation in the

dependent variable can be explained by the independent variables included in the model. Prob (F-Statistics) which is the P value of the F test was used to assess the simultaneous influence of the predictor variable to the response variable whether statistically significant or not. From the table, the Prob>F = 0.0000 meaning that the simultaneous influence of predictor variable to the response variable proved statistically significant.

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|--|----------------|-----------------------------------|--------|-------|----------------------|----------|
| Fixed-effects (within) reg | gression | | | | Number of obs = | 188 |
| Group variable: County | | | | | Number of groups = | 47 |
| | | | | | | |
| R-sq: | within = | 0.1898 | | | Obs per group: min = | 4 |
| | between = | 0.2833 | | | avg = | 4 |
| | overall = | 0.2512 | | | max = | 4 |
| | | | | | | |
| | | | | | F(4,137) = | 8.02 |
| corr(u_i, Xb) = | 0.4334 | | | | Prob > F = | 0.0000 |
| | | | | | | |
| | | | | | | |
| Gross County Product | Coef. | Std. Err. | t | P>t | [95% Conf. Interval] | |
| Budgetary allocation to Agriculture | 16.85183 | 6.801237 | 2.48 | 0.014 | 3.402849 | 30.3008 |
| Budgetary Allocation to Infrastructure | - 0.0146494 | 2.079344 | -0.01 | 0.994 | -4.126408 | 4.09711 |
| Budgetary Allocation to Trade Promotion | -4.498472 | 7.928653 | -0.57 | 0.571 | -20.17684 | 11.17989 |
| Budgetary Allocation to Natural Resources | 24.1857 | 4.595659 | 5.26 | 0.000 | 15.0981 | 33.2733 |
| _cons | 62277.11 | 4211.658 | 14.79 | 0.000 | 53948.85 | 70605.38 |
| sigma_u | 126995.18 | | | | | |
| sigma_e | 10806.499 | | | | | |
| rho | 0.9928111 | (fraction of variance due to u_i) | | | | |
| F test that all $u_i =$ | 0 | F(46, 137) = | 185.11 | | Prob > F = | 0.0000 |

Table 7: Multiple Linear Regression Model

The results from the multiple regression model shows that budgetary allocation to Agriculture was statistically significant in affecting Gross County Product at 5% level. Budgetary allocation to Natural Resources was also statistically significant in affecting the Gross County Product 1% level. Budgetary allocations to Infrastructure and Trade Promotion were not significant at affecting the Gross County Product at 1% or 5% or 10% significance level.

The null hypothesis that beta coefficient of budgetary allocation to Agriculture was equal to 0 (zero) was rejected at 5% level and the research hypothesis that allocation to Agriculture had an effect on Gross County Product was supported. The positive sign of the coefficient implies a positive relationship between budgetary allocation to Agriculture and Gross County Product i.e. as budgetary allocation to Agriculture increases across time by Kshs. 1 Million, Gross County Product increases by Kshs. 16.85 Million. This result arrives at the

same conclusion with previous studies such as Mellor and Johnson (1961), Rosenstein-Rodan (1943), Lewis (1954), Scitovsky (1954), Hirschman (1959), Federico (2005) among other studies that agriculture contributed to economic development. The studies found that agriculture for its resource endowment and the ability to shift the surpluses to the industrial sector played a key role in the acceleration of the industrial pace.

The beta coefficient of budgetary allocation to Natural Resources was statistically significant at 1% level i.e. the study rejected the null hypothesis that beta coefficient of budgetary allocation to Natural Resources was equal to 0 (zero). The positive sign of the beta coefficient of the budgetary allocation to Natural Resources indicates a positive relationship to Gross County Product. This suggests that as budgetary allocation to Natural Resources increases across time by Kshs. 1 Million, Gross County Product increases by Kshs. 24.19 Million. Past studies such Bright (2000), Akram (2012), Davis (2000), Pearce (2000) among others conclude that natural resources plays an important role in economic growth. They found that growth of rural economies can be promoted by governmental policies aimed at supporting small and medium sized enterprises based in many cases on use of local natural resources.

The results from the multiple regression model shows that budgetary allocation to Infrastructure and Trade Promotion were the independent variables that were insignificant in affecting Gross County Product. Therefore the study failed to reject the null hypotheses that beta coefficients for Infrastructure and Trade Promotion were equal to 0 (zero). While results suggest that budgetary allocations to Infrastructure and Trade Promotion reduced Gross County Product, they were not statistically significant at either 1% or 5% or 10% significance levels. Studies such as Gramlich (1994), Muniel (1992) found that the causality direction is from GDP to infrastructure rather than the other way around. Studies by Lin (2011) and Suen (2011) showed that trade openness has positive effects on financial development, capital accumulation, and economic development in high-income countries while in low-income countries, however, the effect is negative and significant. Kim (2012) further showed that trade openness is conducive to economic growth in low-inflation countries but has insignificant impact on growth in high-inflation countries.

7. Summary of Major Findings

The study aimed at investigating the effect of budgetary allocation on gross county product in Kenya. The independent variables for the study included: budgetary allocation to agriculture, infrastructure, trade promotion and natural resources. The study used budgetary allocations in Kenyan Shillings by the County Governments to various sub sectors that are considered drivers of the economy. The study revealed that there is a relationship between budgetary allocation and gross county product in Kenya.

Budgetary allocation to agriculture had a significant positive relationship with the gross county product in Kenya. Agriculture is a key driver of the Kenyan economy and a majority of the population's livelihood. Kenya being a developing economy, its surplus from agriculture provides materials for the industrial sector that then accelerates the industrial pace. This effect trickles down to the counties that are majorly rural and dependent on agricultural activities.

Budgetary allocation to Natural Resources had a significant positive relationship with gross county product in Kenya. Natural Resources form a backbone of the Kenyan economy. A majority of the population derive non-fam income from the natural resources which has sustained their livelihoods. Existing policies in the country and the counties have plaid a key role in supporting small and medium size enterprises that use local natural resource sustainably which has in return promoted growth of rural economies.

Budgetary allocation to Infrastructure was found not to have a significant relationship with gross county product in Kenya. Investments in infrastructure tend to take time for their effect to be felt in an economy. Majority of the counties in Kenya have invested a large proportion of their revenue to infrastructure that form a major part of the development budget. However, much of the infrastructure developed have been office building, education and health facilities which have shown to be insignificant to economic growth in the short-run.

Budgetary allocation to Trade Promotion did not have a significant relationship with gross county product in Kenya. Most of the counties in Kenya have the same characteristics and produce the same goods and services which leave a small margin of benefit from comparative advantage. Much of the trading activities are within the country where few counties engage in international trade. Trade promotion is also among the least funded sub sectors in the counties which limits operations and activities that could stimulate trade.

8. Conclusion

The study aimed at establishing the effect of budgetary allocation to gross county product in Kenya. This study focused on budgetary allocation to Agriculture, Infrastructure, Trade Promotion and Natural Resources. Allocation to Agriculture and Natural Resources were found to be significant while allocation to Infrastructure and Trade Promotion were insignificant. This suggests that increased allocation to Agriculture and Natural Resources increases gross county product of a given county. Therefore, counties need to allocate more resources to these sub sectors to increase their gross county product.

9. Recommendations

The findings of the study have significant policy implication in the county budgetary allocation to various sectors of their economies. The results found that budgetary allocation to agriculture has a significant effect on the gross county product and therefore recommends an increase in the budget allocated to agriculture. Since agriculture plays a key role in the attainment of food security in the country and counties, the policy framework can benefit from the findings of the study by having evidence based on the study. An increase in the budget allocated to agriculture will not only ensure attainment of food security, the surplus will provide raw materials for the local industries and thus accelerate industrialization in the economy.

The study established that budgetary allocation to natural resources significantly effect gross county product. Since most of the counties rely on non-farm income from natural resources, a significant amount of the budget should be allocated to the sustainable exploitation of these resources. Policy makers in the counties should support small and medium size enterprises that use local natural resource sustainably which in return will promote growth of the rural economies as the study has shown.

The study found that budgetary allocation to infrastructure has an insignificant effect on the gross county product. However, existing policies on budgetary allocation in the counties emphasize on considerable allocation of not less than 30% of the budget to development expenditure. At the onset of most counties operations a significant amount of the budget to infrastructure was allocated to construction of office building and other administrative infrastructure that has no significant effect to the economy. The study recommends that counties should henceforth channel their infrastructure budgetary allocation to key infrastructure like roads, irrigation, water and sewerage system that play a key role in economic growth.

The study showed that budgetary allocation to trade promotion has an insignificant effect on the gross county product. However, counties with a comparative advantage can still focus on allocating resources to trade promotion and explore not only local but international markets too.

10. References

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