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GOVERNMENT EXPENDITURES AND THE KENYAN ECONOMIC GROWTH

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ABSTRACT

The economic growth of a nation is key to that economy as it contributes significantly to the development and well-being of that economy. These benefits are dependent on many factors including government expenditures that need to be addressed through the management of the country's fiscal policies. Ideally, a country's economic growth is anticipated to enhance lifestyles by providing education, healthcare access, infrastructure, housing, quality food availability, improved roads, and similar amenities. However, this is not always the case. The economic growth of Kenya has recently attracted attention due to widespread volatility in its growth and inability to hit its Vision 2030 target growth of 10% despite huge investment in expenditure by the government. Therefore, the intent of this research is to ascertain the effect of government expenditure on economic growth in Kenya. In particular, the research ascertained the effect of health expenditure on the economic growth of Kenya. The research was underpinned on the public finance theory and endogenous economic growth. The causal-effect research approach was utilized in the research. The target audience was Kenya as a country with twenty five observations from 2000 to 2024 which is the unit of analysis. Secondary data was gathered with the aid of documentary guides and data sheets from the World Bank and KNBS. STATA software version 14 was used. Diagnostic tests (Auto correlation, multicollinearity, heteroscedasticity, normality, Co-integration, and unit root test) was carried out before data analysis. VAR time series regression model was adopted. Descriptive statistics involving the use of frequencies, mean and standard deviation, and, inferential statistics was adopted in data analysis; and displayed in frequency distribution tables, charts, and graphs. The research's results indicate that health expenditure substantially influenced Kenya's economic growth. The research recommend that the government should invest in the health program (SHA and UHC) for its citizen that will provide a population health to the masses which will eventually lead to high productivity and hence economic growth.

KEYWORDS: *Government Expenditure, Education Expenditure, Health Expenditure, Defense and Security Expenditure, Social Services Expenditure and Economic Growth.*

INTRODUCTION

Inclusive and sustainable economic growth has been a concern for policymakers for decades, and the efficacy of government expenditure in accelerating this growth has been a subject of discussion. Government expenditure has been widely employed as a fiscal policy tool by several nations, however its impact on economic growth remains uncertain. The correlation between governmental expenditures and economic expansion, documented over several decades, still applies today and continues to stimulate discourse amongst policymakers and researchers (Ibrahim, 2019).

Generally, researchers concur that public sector expenditure is substantial and a primary mechanism via which economic growth can be substantially impacted (Adu, Marbuah & Mensah, 2013). Consequently, public expenditure is the most dependable approach for public authorities to address the collective requirements of residents. Public expenditure encompasses government expenditures derived from tax income and other sources (Mallick, Das & Pradhan, 2016). These expenditures concentrate largely on the government to provide stability and facilitate rapid economic growth (Antwi, Mills & Zhao, 2013). Moreover, it serves as a financial instrument that retains and utilizes all gathered money effectively for the nation's advantage. The government primarily allocates funds across many

sectors of the economy, including roads, infrastructure, capital investment, and pensions. Owusu-Nantwi and Erickson (2016) contend that public expenditure constitutes both the initiation and conclusion of government income collecting. Globally, economic growth patterns demonstrate significant variation across different regions and development contexts. U.S. Bureau of Economic Analysis (2024) reported that the United States maintains moderate but stable growth rates averaging 2.5% annually, while the Bank of Japan (2024) reports modest but consistent economic expansion of 1.8%. The European Central Bank (2023) data shows diverse growth trajectories - Greece has recovered from negative growth to achieve 2.2% expansion through structural reforms and improved productivity, while Italy maintains 1.4% growth through industrial innovation and export competitiveness.

China's National Bureau of Statistics (2024) reports robust growth rates averaging 5.2%, driven by manufacturing prowess and technological advancement. The Reserve Bank of India (2024) indicates strong growth momentum at 6.8%, supported by infrastructure investments and digital transformation. The Bank of Korea (2023) reports successful growth of 2.6% through technological innovation and export-oriented industrialization, while Bank Negara Malaysia (2024) data shows a steady 4.8% expansion through diversified industrial policies.

Brazil's Central Bank (2024) and the Bank of Mexico (2024) report moderate growth rates of 3.2% and 2.8% respectively, driven by commodity exports and manufacturing. The National Bank of Poland (2023) reports steady expansion at 3.6% through industrial modernization, while the Czech National Bank (2023) demonstrates 3.2% growth through manufacturing and exports. The Saudi Central Bank and UAE Central Bank (2024) report significant economic expansion at 4.9% and 5.3% respectively, achieved through economic diversification and infrastructure development.

Regionally. African economies demonstrate diverse growth trajectories shaped by development imperatives, resource dependencies, and institutional capacities. According to the African Development Bank (2023), the continent's overall growth remained resilient but uneven across regions, with aggregate economic indicators reflecting varying institutional capacities (Kemoe & Lartey, 2022; Devarajan et al., 2021). The IMF's Regional Economic Outlook (2023) indicates that while economies like South Africa and Botswana maintain robust expansion, others like Ghana and Zimbabwe face significant growth constraints. South Africa's growth trajectory reflects its industrialized economic base (Brou & Bouoiyour, 2023), while Nigeria's expansion patterns demonstrate the challenges of resource-dependent growth (Okon et al., 2020; Adegbie et al., 2022). North African economies, particularly Morocco, Egypt, and Tunisia, show distinct growth patterns, highlighting the role of structural reforms in sustaining economic expansion (Nagou et al., 2021; Oppong et al., 2023).

East African economies within the EAC framework, particularly Tanzania, Uganda, and Rwanda, demonstrate relatively robust growth trajectories, as documented in World Bank (2023) assessments and analyzed by Devarajan et al. (2021) and Oppong et al. (2023). The IMF's Regional Economic Outlook (2023) highlights the region's strong growth fundamentals, while studies by Kemoe & Lartey (2022) and Wang et al. (2022) examine how institutional frameworks and development partnerships influence economic expansion.

Locally, The Kenya National Bureau of Statistics (2024) reports that the nation has implemented substantial political and economic reforms, resulting in unrelenting economic growth, social progress, and political steadiness over the past decade. Nevertheless, its principal developmental obstacles are inequalities, destitution, young joblessness, accountability and disclosure, climate change, persistent inadequate private sector investment, and the economy's vulnerability to internal and external shocks. Moreover, Kenya's substantial expansion prior to the COVID-19 epidemic was predominantly fueled by the public sector, leading to debt risks that have intensified due to constricting global funding circumstances.

Kenya's economic growth for the past two decades has been robust. The economy had widespread growth, averaging 4.8% year from 2015 to 2024, falling below the Vision 2030 target of 10% annual growth. Economic Survey (2024) indicates that even though the economic outlook is broadly positive, it is subject to elevated uncertainty. The inability to meet fiscal consolidation objectives may intensify Kenya's financial vulnerabilities, particularly owing to substantial debt service commitments. Climate challenges may reinitiate inflationary pressures and food insecurity, impacting growth. Subpar development in industrialized nations may hinder the continuous recovery of tourism, trade, and remittances. Increased commodity prices would exacerbate financial conditions, deteriorate external balances, and influence inflation.

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Statement of the Problem

The economic growth of a country is crucial to its overall development, due to its substantial contribution to enhancing the well-being and prosperity of its economy. These major benefits are dependent on many factors including government expenditures that need to be addressed through the management of the country's fiscal policies.

Statistical evidence exhibit that Kenya's GDP growth has been volatile from 2013 to 2023. For instance, in 2013 the economic growth was 3.80% before increasing to 5.02% in 2014. In 2015 it declined to 4.97% and then again to 4.21% in 2016 declining further to 3.84% in 2017. It rose to 5.65% in 2018 and then declined to 5.22% in 2019 before a sharp decline to -0.27% in 2020. In 2021 it increased to 7.59% before again declining to 4.85% in 2022 and finally increasing to 5.4% in 2023. This signifies that despite robust macroeconomic management measures, Kenya continues to have economic hurdles in achieving the Vision 2030 target of 10% growth, hence justifying the necessity of this research. Existing empirical researches on the bearing of public spending on economic expansion suggests that the topic need further discourse, as the findings are inconclusive and differ across regions. For instance, Uzuner, Bekun and Akadiri (2017) used Johansen Cointegration method in Turkey to determine an intermediate correlation amid government expenditure and economic performance concerning Wagner's theory. The study discovered that GDP and government spending are stochastically related. This research was conducted in an economy heavily reliant on natural resources (oil) as opposed to Kenya's economy thus, creating a contextual gap.

In the USA, Dudzeviciute, Simelyte, and Liucvaitiene (2018) concluded that in some instances, minimized government spending would improve economic development while other circumstances demand increased financing. This research concentrated on advanced economies with varying economic conditions, in contrast to Kenya. Concerning the EU nations, Magazzino, Giolli, and Mele (2015) examined the long-term and short-rum relationships between government expenditure and economic growth. Prolonged investigation indicated that the link was unstable and deteriorated over extended periods. Although the study incorporates a significant temporal element, its geographical context renders it impractical for implementation in African countries, particularly Kenya. It is due to this, that this research, sought the effects of government expenditures on Kenya's economic growth.

Objective of the Study

To evaluate the effect of government expenditures on Kenyan economic growth

Specific Objective

To determine the effect of health expenditure on Kenyan economic growth**.**

THEORETICAL REVIEW

Endogenous Growth Theory

Theory was hypothesized by Paul Romer (1986) and Robert Lucas (1988) as an extension of the traditional neoclassical growth model introduced by Solow (1956). In contrast to exogenous growth models, which ascribe long-term economic growth to external forces like technological advancement, the Endogenous Growth Theory contends that economic growth is principally driven by domestic factors within an economy, particularly investments in human capital, knowledge, innovation, and technology. Lucas (1988) emphasized the role of human capital accumulation, arguing that continuous investment in education and skill development enhances labor productivity, leading to sustained economic expansion. The theory suggests that government policies, incentives, and institutional frameworks play a critical role in shaping long-term expansion by influencing the rate of innovation, capital accumulation, and productivity enhancements.

The Endogenous growth theory has been widely influential but also faces strengths and criticisms in economic literature. One of its main strengths is that it offers a more comprehensive explanation of long-term economic growth than exogenous models by identifying specific mechanisms—such as human capital and innovation—that drive productivity improvements (Romer, 1990). Additionally, the theory has strong empirical support, with studies showing that countries investing heavily in R&D, education, and infrastructure tend to experience higher growth rates than those relying solely on natural resources or physical capital accumulation (Aghion & Howitt, 2018; Barro & Sala-i-Martin, 2015). Furthermore, it provides a policy-oriented framework, allowing governments to design interventions that enhance innovation and knowledge spillovers, leading to sustainable development (Jones, 2015). However, the theory has also been criticized for its assumptions. First, it relies on the assumption of perfect competition, whereas real-world markets often exhibit monopolistic behavior and barriers to entry that limit knowledge diffusion (Helpman,

2014). Second, the theory assumes constant or increasing returns to knowledge accumulation, but in reality, diminishing returns may exist in R&D investments, making continuous innovation difficult to sustain (Jones, 2019). Third, critics argue that the theory overemphasizes the role of human capital and innovation, while neglecting the impact of other structural factors such as institutions, trade policies, and macroeconomic stability (Acemoglu, 2019). Lastly, some scholars contend that the theory lacks clear empirical measurement tools, making it difficult to precisely quantify the contribution of endogenous factors to overall growth (Temple, 2019). Despite these limitations, the Endogenous Growth Theory remains a valuable framework for comprehending the role of human capital, technology, and innovation in long-term economic expansion. This theory is appropriate to the research as it underpins the economic growth variable.

Public Finance Theory

This theory was hypothesized by Musgrave (1959) and it states that government expenditure should be devoted to achieving full employment of resources through the fiscal policy using tax management and redistribution through ability-based taxation and in kind through the provision of goods and services to increase aggregate demand and economic efficiency to achieve politically acceptable distribution of income. David Hyman characterizes public finance as the branch of economics that examines governmental activities and the various methods of funding government expenditures (Hyman, 2019).

Obioma and Ozughalu (2021) advanced public finance theory by developing fiscal synchronization hypothesis. This is based on the belief that public revenue and expenditure is jointly related and therefore is characterized by contemporary feedback between public revenue and public expenditure. Therefore, the domain of public finance is deemed tripartite, encompassing the government's influence on the efficient utilization of resources, the distribution of income amongst citizens, and the stabilization of the economy. This theory is pertinent to the research as it underpins the government expenditure variable on service delivery.

EMPIRICAL LITERATURE REVIEW

Health Expenditure and Economic Growth

Yuxiao Chunhai and Qizhe (2022) employ a non-parametric additive model to ascertain the influence of government health spending on economic development and regional disparities in Asia. The outcomes suggest that the ratio of government health expenditure to GDP is beneficial to economic development, whereas its effect in the eastern and central regions is detrimental. The research suggests that the government enhance the share of health expenditure in GDP, enhance investment in fixed assets, boost exports in the eastern region, and persist with the western support program. This study was conducted in Asia and employed a non-parametric additive model, so establishing both contextual and methodological gaps that this research aimed to address.

Odhiambo (2021) researched the connection between health expenditure and economic expansion in sub-Saharan Africa. The research investigates the causal association between health expenditure and economic expansion utilizing panel data from SSA nations from 2008 to 2017. The research employed a panel model and discovered that, where public spending serves as a proxy, a clear unidirectional connection from health expenditure to economic growth is evident in low-income countries, whereas no such causality is observed in middle-income nations. This study was done in sub-Saharan African countries and adopted a panel model thus creating both the contextual and methodological gaps that the current research intended to address.

Viju and Wullianallur (2020) research the correlation between public health expenditure and economic expansion throughout the US. The research employed visual analytics to gather economic and health data from the Bureau of Economic Analysis and the Bureau of Labor Statistics for the period 2003–2014. The outcomes demonstrate a robust favorable link between healthcare expenditure and the economic variables of income, GDP, and labor productivity. Healthcare expenditure exhibits an adverse connection with multi-factor productivity, while demonstrating a favourable connection with labor productivity measures, personal expenditure, and GDP. The research indicates that an escalation in healthcare spending correlates positively with economic performance. The consequences of policy indicate that the well-being of citizens contributes to a more robust economy. Consequently, prudent investment in diverse healthcare sectors would enhance income, GDP, and productivity, while mitigating poverty. This study was done in the United States and adopted visual analytics thus creating both the contextual and methodological gaps that the current study aimed to fill.

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Conceptual Framework

The structure exhibits the anticipated link between the predictor variables; (health expenditure) and the dependent variable (economic growth). Figure l below clearly illustrates this.

Independent variable

Dependent Variable

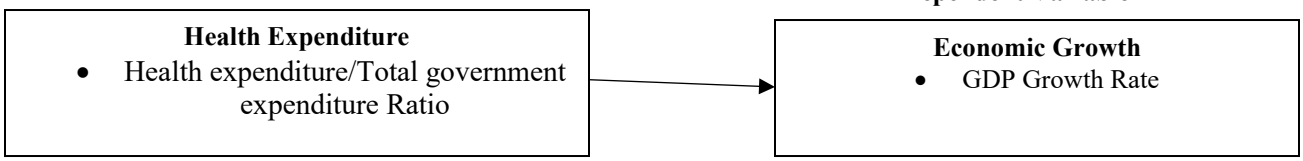

Figure 1: Conceptual Framework

Source: Researcher (2025)

Research Design

This conclusive review is utilized to establish a causal association between two or more variables, largely to identify the source of the observed behavior. It, nonetheless, permits the researcher to select which alterations in an independent variable correlate to modifications in the dependent variable. To ensure precision, it is presumed that other variables remain unchanged. It can assist in determining the exact link between two variables.

Target Population

In this research the researcher focused on the Kenyan economy as the unit of analysis with 25 years observations.

Sampling Design

The research utilized data observations for 25 years leading to 25 data point observations. Being a small sample the study adopted a census sample design where all data point observations were under scrutiny.

Data Collection Instruments.

The research adopted published secondary data from the World Bank and KNBS. The secondary data was collected using the data extraction form. This form collected information on the annual amount spent on education, spent on health, the on defense and security, the annual amount spent on social services, and the annual GDP growth rate. The data, which was longitudinal, was obtained for a period of 25 years, from 2000 to 2024.

Data Collection Procedure

Before collecting data, Kenyatta University approved and authorized the researcher to collect data necessary for the study. Further, authorization was sought from the NACOSTI. Once license was granted, Secondary data was extracted from annual reports from the World Bank and KNBS from the year 2000 to 2024 with the help of a secondary data gathering sheet.

Data Analysis and presentation

After gathering the data, the researcher cleaned and coded that data before carrying out the analysis. Analysis was done with the help of STATA software version 14 where descriptive statistics and inferential statistics was done. Descriptive statistics concentrated on means and standard deviations of study variables whereas inferential statistics focused on correlational analysis as well as regression analysis. The analyzed data was exhibited in tables, and graphs. The time series regression model was built based on a research by Olabisi and Funlayo (2012). The model is specified as follows

$$\boldsymbol{Y_t = \lambda_0 + \lambda_1 X_{1t-1} + \varepsilon}$$

Whereby
Y=Economic Growth
$\boldsymbol{X_1}$= Health expenditure
λ_1, =Coefficient of health expenditure
$\boldsymbol{\varepsilon}$ is the error term.
λ_0 = Intercept of the regression line
t=time period (2000-2024)

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RESEARCH FINDINGS AND DISCUSSIONS

Descriptive Statistics

Table 1: Descriptive Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
GDP Rate	25	4.648	1.798638	-.3	7.6
Health Expenditure	25	8.806	3.411167	1.5	12.42

Source: Study Data (2025)

The GDP rate mean is 4.648, the std. dev. is 1.798638, and the range of values is -0.3-7.6, as per the results. This suggests that the GDP growth rate demonstrates both uniformity and equilibrium throughout the study period, with an annual average growth of 4.65%. The Health Expenditure exhibited a somewhat variable average of 8.806 and a std. dev. of 3.411167, with a minimum of 1.5 and a maximum of 1.81. This implies an average contribution of 8.81% over the total public expenditure over time.

Correlation Analysis

The correlation matrix among the variables is portrayed in Table 2.

Table 2: Correlation Analysis

	GDP Rate	Health Expenditure
GDP Rate	1.0000	
	25	
Health Expenditure	0.3953	1.0000
	25	25
	0.0005	

Source (Study data, 2025)

The correlation amongst health spending and economic expansion was moderate and beneficial, illustrated by a Pearson coefficient of 0.3953 and a significance level of 0.0005 ($p<0.05$). These results are compatible with Viju and Wullianallur (2020) who found an escalation in healthcare spending correlating positively with economic performance.

Regression Analysis

The time series data was identified as steady, classified as I(0), without requiring differencing, as illustrated in Table 3. Consequently, in these cases, the data may be analyzed utilizing either the OLS or VAR model (Shrestha & Bhatta, 2018). Moreover, as variable was stationary at I(0), cointegration is not required for this. The results of this investigation, utilizing a VAR time series regression grounded in an empirical model, are displayed in Table 3.

Table 3: Regression Coefficients

Vector Auto-Regression						
Sample: 2004 - 2024					No. of obs =	21
Log likelihood = 3.022543					AIC =	.5692816
FPE = .1097613					HQIC =	.6664336
Det (Sigma_ml) = .0439045					SBIC =	1.016934
Equation	Parms	RMSE	R-sq	chi2	P>chi2	
GDP Rate	9	.277187	0.9878	1703.023	0.0000	
GDP Rate	Coef.	Std. Err.	z	P>z	[95% Conf. Interval]	
GDP Rate						
GDP Rate						
L1.	-2.110081	.0566928	-37.22	0.000	-2.221197	-1.998966
L2.	-2.548392	.0855927	-29.77	0.000	-2.71615	-2.380633
L3.	-3.167697	.1324995	-23.91	0.000	-3.427391	-2.908002
L4.	-1.038123	.0569499	-18.23	0.000	-1.149743	-.9265034
Health	.2280869	.042838	5.32	0.000	.1441259	.3120479
_cons	60.43171	2.430205	24.87	0.000	55.6686	65.19483

Source: Researcher (2025)

The equation obtained was:

GDP Rate$_t$ = 60.43171+ 0.2280869HE$_t$

The outcomes suggest that the explanatory variables in the model accounted for 98.78% of the variability in economic growth, as demonstrated by the R Square value of 0.9878 reflecting the simultaneous effects of the independent variables. Thus, 1.22% of the economic growth outcome was unexplained by the model's variables, suggesting the influence of external influences not considered in the study. The p-value of 0.0000, <0.05, exhibits that this finding is statistically significant. When the predictive factors were disregarded, economic growth grew by 60.43171. The growth is significant, as demonstrated by the p-value of 0.000.

Additionally, the statistics suggests the unit rise in health expenditure would equate to a 0.2280869 improvement in economic expansion. A p-value of 0.000, being less than 0.05, exhibited both favorability and statistical significance. Hence, null hypothesis two was rejected. This finding are in line with the findings by Viju and Wullianallur (2020) who researched on the correlation between public health expenditure and economic expansion throughout the US employing visual analytics to gather economic and health data from the Bureau of Economic Analysis and the Bureau of Labor Statistics for the period 2003–2014 and found a robust favorable link amongst healthcare spending and the economic variables of income, GDP, and labor productivity. it further agree with the findings by Yuxiao Chunhai and Qizhe (2022) who employed a non-parametric additive model to ascertain the influence of government health spending on economic development and regional disparities in Asia and found that the ratio of government health expenditure to GDP is beneficial to economic development.

CONCLUSION AND RECOMMENDATIONS

Conclusion

The research findings indicate that health expenditure considerably influences economic growth in Kenya. Consequently, health cost strongly influences economic growth; thus, cutting health expenditure will promote economic development. Health systems significantly enhance population health and exert both direct and indirect influences that favorably contribute to national economic goals. These encompass macroeconomic growth, employment, poverty alleviation initiatives, and societal welfare.

Recommendations

The research found that health expenditure has a positive influence on the economic growth. The research recommends that the government should invest in the health program (SHA) for its citizen that will provide a population health to the masses which will eventually lead to high productivity and hence economic growth.

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