



# FOREIGN CAPITAL FLOWS AND ECONOMIC GROWTH IN KENYA

Nuru Abdurahman Muhdhar<sup>1</sup>, Dr. Vincent Shiundu Mutswenje<sup>2</sup>

<sup>1</sup>Masters Student, Kenyatta University, Kenya

<sup>2</sup>Department of Accounting and Finance, Kenyatta University, Kenya

Article DOI: <https://doi.org/10.36713/epra22412>

DOI No: 10.36713/epra22412

## ABSTRACT

Economic growth of any nation is key to that economic as it contributes significantly to the development and wellbeing of that economy. These major benefits are dependent on many factors including foreign capital flows that need to be addressed through the management of the country's fiscal policies. Ideally, a country's economic development is anticipated to enhance living standards by providing education, healthcare access, infrastructure, housing, quality food supply, improved roads, and similar amenities. However, this is not always the case. Economic growth of Kenya has recently attracted attention due to widespread erratic volatility in its growth despite huge increase in foreign capital flows. Therefore, the resolve of this research is to ascertain the effect of foreign capital flows on economic growth in Kenya. In particular, the research explored the effect of foreign debt on economic growth of Kenya. The research was underpinned on the Keynesian theory and Wagner's Law. The correlational explanatory research approach was used in the study. The target audience was Kenya as a country which is also the unit of analysis. Secondary data, was acquired with the aid of documentary guides and data sheets from World Bank, CBK and KNBS. Diagnostic tests (Auto correlation, multicollinearity, heteroscedasticity, normality, co-integration and unit root test) was carried out before data analysis. Multiple linear time series regression model was adopted. Descriptive statistics, including frequencies, mean, and standard deviation, along with inferential statistics such as Pearson correlation and regression analysis, was employed in data analysis and displayed in frequency distribution tables, charts, and graphs. The research suggested that foreign debt, when analyzed, had a statistically significant bearing on the economic growth in Kenya with  $p$ -value of 0.000. As a result, these hypothesis was rejected at 5% significance level. The report recommended that the Kenyan government should aim to lower its budget deficit to GDP ratio to an average of 4 percent prior to 2030. The fiscal policy has inadequately responded to rising debt levels, thereby jeopardizing the Government's pursuit of fiscal debt sustainability. Consequently, the National Assembly ought to enact a fiscal law establishing a maximum threshold for the fiscal deficit to GDP ratio that the National Treasury cannot surpass at any time, aligning with the long-term debt strategy to prevent the public debt to GDP ratio from escalating uncontrollably.

**KEY WORDS:** Foreign Capital Flows, Foreign Direct Investment, Remittances, Foreign Portfolio Investment, Foreign Debt and Economic Growth.

## INTRODUCTION

Inclusive and sustainable economic development has been a top priority for policymakers for many years, and the potential of foreign capital flows to drive this growth has been a topic of discourse. The influx of foreign wealth to Africa has become a prominent topic of discourse amongst scholars lately. The global economy have been expressively impacted by the debt crisis from the 1980s to the present, particularly in Africa, Latin America, and select nations in Eastern Europe and Asia (Musibau *et.al*, 2017).

Globally, the worldwide economic downturn of 2008–09 (GFC) rekindled interest in the correlation between EPU and foreign capital inflows, subsequently influencing real sector expansion, currency rates, and asset prices. Investigations on the determinants of various forms of capital flows have achieved an accord: Shocks linked to global improbability propel the fluctuations of capital flows across nations.



Regionally, Musibau contends that the African continent has been significantly impacted by currency fluctuations, deteriorating infrastructure, pervasive corruption, and economic and political instability, amongst other factors that deter foreign investment in many African nations. Nonetheless, the diverse influx of foreign money (loans, foreign direct investment, grants, and portfolio investments) proved advantageous for emerging economies to reconcile the disparity between local savings and domestic investment, hence facilitating development (Chenery et al., 1996, quoted in Wondwesen, 2011).

Numerous African nations saw sluggish development from independence in the 1970s until the 1990s. Easterly et al (1997) characterized Africa as a catastrophe of development. It is crucial to recognize that the development dynamics in Africa have undergone a transformation since the early 1990s. A significant number of the realm's rapidly expanding economies are located in Africa, with most African nations outpacing wealthy nations and achieving growth rates above the global average. The IMF projects that sub-Saharan Africa's GDP would increase by 5.25% in 2011 and 5.75% in 2012, amid a global economic growth rate of around 4% (IMF, 2011). All significant financial inflows to Africa have substantially risen since 1980.

In Kenya, attempts to entice foreign capital inflows commenced with the implementation of swift capital account liberalization from 1991 to 1995. These actions encompassed the relaxation of restrictions on foreign currency transactions and the implementation of FEBCs (Yoshino et al., 2015). Kenya in 2008 launched its "Vision 2030" initiative to expedite the country's evolution into a swiftly growing middle class nation by 2030. The objective is to render the nation internationally competitive and rich, ensuring that every citizen enjoys a good quality of life by 2030 (Ndung'u et al., 2011). The vision was underpinned by three essential pillars: economic, social, and political. The aim of the economic pillar is to have a continuous yearly economic growth rate of 10% over a span of 25 years. This is anticipated to be accomplished by locally produced resources, whereas Kenya continues to receive remittances from its diaspora, increased FDI, FPI, and partnerships with its development collaborators (GoK, 2007).

Kenya's economic development is anticipated to be realized via augmenting savings and investment to exceed 30% of GDP (Ndung'u et al., 2015). Despite these initiatives, capital inflows into Kenya have always been modest. Despite historically high levels, official development aid (ODA) has lately seen a dip. This prompts two inquiries: How to analyze foreign capital flows, and which type warrants primary focus, considering their varying contributions to economic growth, as the impact of capital flow on economic expansion is reliant upon the nature of the foreign capital and the characteristics of the economy (Adeola & Aziakpono, 2017; Aizenman et al., 2013).

### Statement of the Problem

Economic growth of any nation is key to that economic as it contributes significantly to the development and wellbeing of that economy. These major benefits are dependent on many factors including foreign capital flows that need to be addressed through the management of the country's fiscal policies.

Statistical evidence suggests that Kenya's GDP growth has seen constant fluctuations from 2012 to 2022, with notable dips from 4.57% in 2012 to 3.80% in 2013, followed by an improvement to 5.02% in 2014, and a further fall to 4.97% in 2015. In 2016 it further declined to 4.21% and further declined to 3.84% in 2017. In 2018 it improved to 5.65% but declined to 5.11% in 2019 before worsening to -0.27% in 2020. In 2021 it picked up to 7.59% but again dropping down to 4.85% in 2022. This signifies that despite robust macroeconomic management efforts, Kenya continues to encounter challenges stemming from external developments and risks associated with a more open economic environment, thereby indicating a considerable distance to achieving the Vision 2030 target of 10% annual economic expansion.

The existing empirical data about the influence of foreign capital flows on economic development indicates that the topic warrants more discourse, since the findings are ambiguous and differ between regions. Klobodu and Adams (2016) analyzed the varying impacts of capital flows on economic development in Ghana from 1970 to 2014 applying ARDL methodology. The results demonstrate that, both in the short and long term, capital flows (such as FDI, assistance, and foreign debt) adversely impact economic development. Nevertheless, remittances show a positive but negligible elasticity across all regressions. This study was done in Ghana and incorporated FDI, external debt and aid creating both contextual and conceptual gaps that this research aimed to address.



The study examines the impact of capital flow on economic growth in Ethiopia as well as the causal short-run and long-run relationship among the variables, using time series data from 1980 – 2010. Using the ARDL Approach, the result revealed that all the variables are statistically significant; which implies that the capital flow has an impact on economic growth in both short- and long-run dynamic equilibrium models. Additionally, VAR and Innovative Accounting Techniques approach to Granger causality analysis showed that there exists bidirectional causality between gross capital flow and economic growth. Consequently, these findings suggest that policy makers should critically understand, the nature, what drives the capital flows and the impact of its sudden surge or reversal on economy. Moreover, it is also recommended that government should continue to pursue trade and foreign exchange policies that would ensure competitiveness of the export sector viability and economic growth.

Bewket (2021) analyzed the influence of capital flow on economic development in Ethiopia, along with the causal relationships among the variables in both the short and long term. The outcomes demonstrated that all variables are statistically noteworthy, demonstrating that capital movement affects economic growth in both short- and long-term dynamic equilibrium models. This study was done in Ethiopia and cannot be generalized in Kenya thus creating a contextual gap that the current research is seeking to address. Nguyen and Hung (2021) analyzed the influence of foreign capital inflows on Vietnam's economic development from 1989 to 2019 using ARDL procedure. The results demonstrate a long-term link between economic development and foreign capital inflows. This study varies from the current study as it was done in a developed nation as opposed to developing nation like Kenya.

Adeola and Aziakpono (2022) analyzed the relative effects of multiple forms of foreign financial flows on Kenya's financial stability. The data clearly indicate a strong long-term causation only from portfolio equity to economic expansion, demonstrating an optimistic and considerable impact on economic growth. This was conducted in Kenya; nonetheless, there exists a conceptual framework and timeframe that the present research aims to address. Tian, Haan, and Zhao (2022) studied the Granger causal connection amongst capital flows and economic growth in China. The findings demonstrate that accumulative portfolio inflows and accumulative other investments inflows adversely affect GDP growth, whilst accumulative portfolio outflows and accumulative other investments outflows confidently influence GDP growth. The study was done in an advanced economy which cannot be generalized in a developing country like Kenya. It is on this backdrop that this research endeavors to examine the effects of foreign debt on the economic growth of Kenya.

### **Objective of the Study**

To assess the impact of foreign capital inflows on the economic growth in Kenya

### **Specific Objective**

To establish the effect of foreign debt on economic growth in Kenya

## **THEORETICAL REVIEW**

### **Keynesian Theory**

The General Theory, a contemporary form of classical macroeconomics, was initiated by John Maynard Keynes in 1936. It encompasses five components: Initially, Keynes rejects the loan interest rate which are viewed as fictitious and are nonexistent in the market. However, Keynes failed to offer a compelling rationale for this argument. Secondly, Keynes brought about the essential uncertainty inherent in investment. Money demand and expenditure, as well as investment, are significantly affected by expectations regarding an uncertain future. Third, Keynes familiarized a fresh theory that succeeded the loan fund interest rate theory: the concept of liquidity preference. Keynes posits that the interest rate is profoundly affected by the demand for money, which is shaped by vagueness over the forthcoming. The underlying ambiguity has the potential to exacerbate at any moment, culminating in a strengthening of the demand for money and interest rates. Keynes asserts that the marginal product of labor is influenced by the level of production, which in turn determines real compensation. This is his fourth opinion. Firms that possess market influence are capable of increasing their actual compensation. The comparable framework of their products also influences actual wages. Fifth, Keynes said that the pricing system could not attain a state of full employment equilibrium inside an economy. The total income is substantial since it contributes to an economic slowdown. The government's higher spending will result in a rebound in the amount of money that circulates in society. It promotes the notion that society should increase demand by increasing expenditure. This theory concluded that economic development is influenced by government



expenditure (Solikin, 2018). This theory is evaluated using economic development variables, specifically Gross Domestic Product (GDP) (Arjomand, Emami, & Salimi, 2016).

### **Wagner's Law**

Adolf Wagner proposed another theory about government expenditure in the 19<sup>th</sup> century. He contended that the sophistication of a nation's economy influences the magnitude of government, which may be quantified by the level of government expenditure (Sukartini & Saleh, 2012). Wagner's law prioritizes the influence of GDP on government expenditure. Irandoust (2019) asserts that Wagner's rule pertains to the long-term correlation between per capita income and governmental administration, suggesting that in examining causation, several hypotheses may influence economic policy decisions. The neutrality theory posits that there is no correlation between government expenditure and GDP. The Wagnerian theory posits a direct causal link between GDP and government expenditure, as well as between public spending and GDP. The final hypothesis posits a robust bidirectional correlation between GDP and government expenditure. Numerous prior studies have juxtaposed Wagner's Law with Keynes's Theory due to their conflicting perspectives (Solikin, 2018). Our emphasis does not include testing Wagner's Law, since prior research has shown that it often pertains to developed nations, indicating that more economic development correlates with increased government expenditure. This theory is relevant to the research since it substantiates the independent variable.

### **Empirical Literature Review**

#### **Foreign Debt and Economic Growth**

Manasseh et al. (2022) investigated the influence of foreign debt on economic development. The research applied yearly time series data, concentrating on thirty chosen Sub-Saharan African (SSA) nations from 1997 to 2020. The DSG Method of Moments estimate approach was used while accounting for traditional sources of economic development. The research empirical results indicate that foreign debt and its volatility adversely and significantly affect economic development in SSA. This research recommends that the SSA government endeavor to reduce excessive foreign debt to improve the region's capacity to invest in its financial future and to mitigate the possibility of repaying loans with insufficient income. Governments must guarantee that all borrowed funds are adequately monitored and used for their intended objectives to stimulate economic development. Whereas this study was done among thirty selected Sub-Saharan African countries and employed a Dynamic System Generalized Method of Moments estimation technique, its finding cannot be generalized in Kenyan context, thus creating both contextual and methodological gaps that the current study is came to fill.

Zhang, Dawood, and Al-Asfour (2020) researched the causal link between foreign debt and economic development in emerging nations. The model comprises 18 chosen Asian developing and transitioning countries from 1995 to 2019. They used dynamic heterogeneous panel data methodologies, including PMG, robust CS-ARDL, and paired panel causality testing. The findings of PMG and CS-ARDL indicate a causal relationship between foreign debt and economic growth in both the short and long term. The paired Granger causality test revealed a bidirectional causal link between total external debt, public external debt, private external debt, and economic expansion, with economic growth also influencing external debt. The findings indicated the presence of causation in both the short-and-long run between foreign debt and economic development, as well as bi-directional causality from external debt to economic progression and vice versa. Both the dynamic models and robust estimators yielded identical conclusions about the influence of primary factors on economic development in Asian emerging and transition countries. The study's conclusions indicate the need of ensuring debt management, investing in productive sectors, enhancing local savings, reducing external reliance, and prioritizing global commerce. Whereas this study was done among 18 selected Asian developing and transition economies and applied a dynamic heterogeneous panel data methods, its finding cannot be generalized in Kenyan context, thus creating both contextual and methodological gaps that the current study is came to fill.

Ferreira (2016) studied the causal association between economic growth and three types of debt—public, overseas, and private—in a sample of 28 EU countries, utilizing two balanced panel datasets from 2001 to 2012 and 2007 to 2012 to account for the onset of the worldwide economic downturn of 2007 to 2008. The author applied panel Granger causation estimates and identified statistically significant bidirectional causation between debt and economic growth, demonstrating that economic expansion reduces governmental debt. Whereas this study was done among 28 sample

countries of European Union and a panel approach, its finding cannot be generalized in Kenyan context, thus creating both contextual and methodological gaps that the current study is came to fill.

### Conceptual Framework

The structure exhibits the anticipated link between the predictor variables; (foreign debt) and the dependent variable (economic growth). Figure 1 below clearly illustrates this.

#### Independent variable

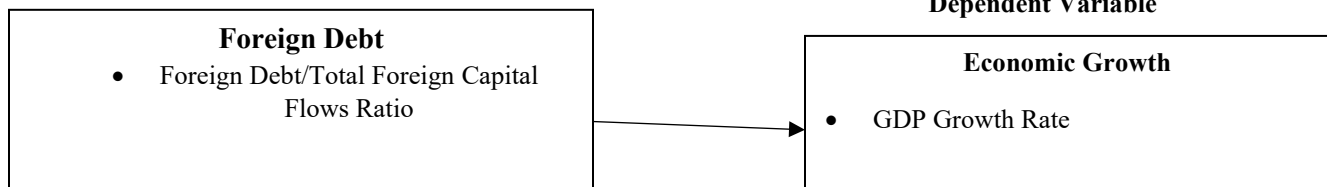


Figure 1.1: Conceptual Framework

Source: Researcher (2025)

### Research Design

The explanatory correlational research design to be utilized for this research. Garcés-Mascareñas (2012) characterizes correlation design as a non-experimental quantitative methodology whereby the researcher use correlational statistics to assess and delineate the extent of link between variables or score sets. Thus, the design enabled the research to explain the links and interdependency between foreign capital flows and economic growth.

### Target Population

Saunders, et al (2016) aver that population alludes to the whole set of items about which the research intends to draw inferences. In this research the researcher concentrated on the Kenyan economy as an entity.

### Data Collection Instruments.

The research employed public secondary data from the World Bank, Central Bank, National Treasury, and KNBS. Secondary data is a vital source of information in any study as they provide a source of facts that is easily available, more accurate, and verifiable. These sources are permanent, and the researcher can counter-check them anytime. The secondary data was collected using the data extraction form. This form collected information on annual foreign debt and GDP growth rate. The data, which was longitudinal, was obtained for a period of 10 years that is from 2014 to 2023.

### 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 permission is granted, Secondary data was extracted from annual reports from World Bank, CBK and KNBS from the year 2014 to 2023.

### Data Analysis and presentation

After collecting 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 analyzed. Descriptive statistics focused on means and standard deviations of study variables whereas inferential statistics centered on correlational analysis as well as regression analysis. The analyzed data was displayed in forms of graphs, tables and charts. The multiple linear time series regression model was developed based on the research by Olabisi and Funlayo (2012). The model was as follows

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

Whereby Y= Economic Growth

$X_1$ = Foreign Debt

$\lambda_1$ , =Coefficient of the component of Foreign Debt

$\varepsilon$  is the error term.

$\lambda_0$  = Intercept of the regression line

$t$ =time period (2014-2023)



## RESEARCH FINDINGS AND DISCUSSIONS

### Descriptive Statistics

**Table 1: Descriptive Statistics**

Variable	60	Mean	Std. Dev	Min	Max
Foreign Debt	10	.8769	.0584626	.722	.924
GDP Rate	10	4.477	1.989244	-.27	7.59

#### Source: Study Data (2025)

The GDP rate mean is 4.477, the std. dev. is 1.989244, and the range of values is -0.27-7.59, 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 4.5%. The Foreign Debt had a score of 0.8769 and a std. dev. of 0.0584626. This bottommost value was 0.722, whereas the uppermost figure was 0.924. This implies the highest contribute of foreign capital flows with an approximate 88%% of total foreign capital flows that was rising over time.

### Correlation Analysis

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

**Table 2: Correlation Analysis**

	Foreign Debt	GDP Rate
Foreign Debt	1.0000	
	10	
GDP Rate	-0.8731	1.0000
	0.0000	
	10	10

#### Source (Study data, 2025)

The link between foreign debt and economic development was robust and inversely correlated, evidenced by a Pearson coefficient of 0.8731 and a significance level of 0.0000 ( $p < 0.05$ ). This outcome aligns with the analysis of Manasseh et al. (2022), which suggest that foreign debt and its volatility adversely and considerably impact economic development in SSA.

### 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 all variables were 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**

VAR						
Sample: 2016 - 2023						No. of obs = 8
Log likelihood = -12.21081						AIC = 4.802702
FPE = 18.59468						HQIC = 4.333876
Det (Sigma ml) = 1.239645						SBIC = 4.872214
Equation	Parms	RMSE	R-sq	chi2	P>chi2	
GDP Rate	7	3.14915	0.7155	20.11965	0.0026	
GDP Rate						
	GDP Rate	Coef.	Std. Err.	z	P>z	[95% Conf. Interval]
L1.		-1.151856	.3939074	-2.92	0.003	-1.923901 - .3798119
L2.		-.9351969	.5423554	-1.72	0.085	-1.998194 .1278001
FD						
		236.5998	1393.164	0.15	0.000	-2520.301 2940.803
cons		-191.4783	1389.895	-0.14	0.090	-2915.622 2532.666

#### Source: Researcher (2025)



The equation obtained was:

$$\text{GDP Rate}_t = -191.4783 + 236.5998\text{FD}_t$$

The outcomes suggest that the explanatory variables in the model accounted for 71.55% of the variability in economic growth, as demonstrated by the R Square value of 0.7155 reflecting the simultaneous effects of the independent variables. Thus, 28.45% 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 0.0026, which is less than 0.05, suggests that this finding is statistically significant. When the predictive factors were disregarded, economic growth dropped by 191.4783. The decline is not significant, as demonstrated by the p-value of 0.090.

The findings suggest that a unit rise in foreign debt could culminate in a 236.5998 improvement in economic growth. A p value of  $0.000 < 0.05$  demonstrates that the result is both advantageous and statistically significant. So, null hypothesis four was rejected. This finding are in line the findings by Manasseh et al. (2022) who investigated the influence of foreign debt on economic development. The research applied yearly time series data, concentrating on 30 Sub-Saharan African nations from 1997 to 2020. The DSG Method of Moments estimate approach was used. The research empirical results indicate that foreign debt and its volatility adversely and significantly affect economic development in SSA. The findings also agree with those by Zhang, Dawood, and Al-Asfour (2020) who researched the contributory connection amongst foreign debt and economic development in emerging nations. The model comprises 18 chosen Asian developing and transitioning countries from 1995 to 2019. They used dynamic heterogeneous panel data methodologies. The findings indicate a causal link between foreign debt and economic growth in both the short and long term.

## CONCLUSION AND RECOMMENDATIONS

### Conclusion

The research's outcomes demonstrate that foreign debt significantly influences economic growth in Kenya. The foreign debt significantly influences economic growth; therefore, addressing it will enhance economic growth. Foreign debt is a fundamental element of a nation's financial framework and profoundly impacts its economic choices. Monitoring a nation's foreign debt level is crucial in macroeconomics. It serves as a crucial measure of economic strength, stability, and potential for future development.

### Recommendations

The study found that foreign debt significantly improves economic growth in Kenya. This research suggests that the Kenyan government should aim to lower its budget deficit to GDP ratio to an average of 4 percent prior to 2030. The fiscal policy has inadequately responded to rising debt levels, thereby jeopardizing the Government's pursuit of fiscal debt sustainability. Consequently, the National Assembly ought to enact a fiscal law establishing a maximum threshold for the fiscal deficit to GDP ratio that the National Treasury cannot surpass at any time, aligning with the long-term debt strategy to prevent the public debt to GDP ratio from escalating uncontrollably.

## REFERENCES

1. Abala, D. O. (2014). *Foreign direct investment and economic growth: An empirical analysis of Kenyan data*. *DBA Africa Management Review*, 4(1), 62–83.
2. Acosta, P., Calderón, C., Fajnzylber, P., & Lopez, H. (2008). *What is the impact of international remittances on poverty and inequality in Latin America?* *World Development*, 36(1), 89–114.
3. Adams, S. (2009). *Foreign direct investment, domestic investment and economic growth in sub-Saharan Africa*. *Journal of Policy Modeling*, 31(6), 939–949.
4. Adegbite, E. O., Ayadi, F. S., & Felix Ayadi, O. (2008). *The impact of Nigeria's external debt on economic development*. *International Journal of Emerging Markets*, 3(3), 285–301.
5. Adenuksi, D. E., Aziakpono, M. J., & Ocran, M. (2011). *The changing impact of macroeconomic environment on remittance inflows in sub-Saharan Africa*. *Journal of Academic Research in Economics*, 3(2), 136–167.
6. Adeola, O., & Aziakpono, M. (2017). *The relative contribution of alternative capital flows to South Africa: An empirical investigation*. *Journal of Economic and Financial Sciences*, 10(1), 47–68.
7. Adeola, O. O. (2017). *Foreign capital flows and economic growth in selected sub-Saharan African economies [PhD Dissertation]*. Stellenbosch University.
8. Abdul Jabbar Abdullah. (2013). *Education and economic growth in Malaysia: The issues of education data*. *Procedia Economics and Finance*, 7(2013), 65 – 72.



9. Abdullah, H., & Maamor, S. (2010) Relationship between national product and Malaysian government development expenditure: Wagner's law validity application. *International Journal of Business Management*, 5(1), 88 – 97.
10. Aboubacar, B., & Xu, D. (2017). The impact of health expenditure on economic growth in sub-Saharan Africa. *Theoretical Economics Letters*, 07(03), 615–622.
11. Ahmad, R., & Hasan, J. (2016). Public health expenditure, governance and health outcomes in Malaysia. *Jurnal Ekonomi Malaysia*, 50 (1), 29-40.
12. Aziz, N., & Asadullah, M. N. (2017). Military spending, armed conflict, and economic growth in developing countries in the post-Cold War era. *Journal of Economic Studies*, 44(1), 47-68.
13. Bedir, S. (2016). Healthcare expenditure and economic growth in developing countries. *Advances in Economics and Business*, 4(2), 76–86. DOI:
14. Benoit, E. (1978). Growth and defense in developing countries. *Economic Development and Cultural Change*, 26, 271-280.
15. Blaug, M. (1970). *An Introduction to the Economics of Education*. London: Allen Lane.
16. Chai P. Y., Whyntes D. K., Sach T. H. (2008). Equity in health care financing: The case of Malaysia. *International Journal for Equity in Health*, 7, 1-14.
17. Chau, H. W., Khin, A. A., & Meng, A. T. G. (2016, August). Public expenditure and economic growth in Malaysia. Paper presented at The 3rd International Conference on Accounting Studies (ICAS), Kedah, Malaysia.
18. Cao, C. (2004). Zhongguancun and China's high-tech parks in transition. *Asian Survey*, 46(5), 647– 668.
19. Churchill, S. A., Yew, S. L., & Ugur, M. (2015). Effects of government education and health expenditures on economic growth: A meta-analysis. Report G9ERC21, Greenwich Political Economy Research Center, London.
20. Craigwell, R., Bynoe, D., & Lowe, S. (2012). The effectiveness of government expenditure on education and health care in the Caribbean. *International Journal of Development Issues*, 11(1), 4-18.
21. De Meulmester, J. C. and Rochet, D. (1995). A causality analysis of the link between higher education and economic development. *Economics of Education Review*, 144(4), 351-361.
22. Dunne, J. P., & Uye, M. (2014). Defence spending and development. In Tan, A. (Ed.), *The Global Arms Trade: A Handbook*. London: Europa.
23. Édes, B. W., Gemenne, F., Hill, J., & Reckien, D. (2012). *Addressing Climate Change and Migration in Asia and the Pacific*. Manila: Asian Development Bank.
24. Gisore, N., Kiprop, S., Kalio, A., Ochieng, J., & Kibet, I. (2014). Effect of government expenditure on economic growth in East Africa: A disaggregated model. *European Journal of Business and Social Sciences*, 3(8), 289–304.
25. Govindaraju, V. G. R. C., & Rao, R. (2011). Economic growth and government spending in Malaysia: A re-examination of Wagner and Keynesian views. *Economic Change & Restructuring*, 44(3), 203–219.
26. Haseeb, M. (2014). *Defense Expenditure and Economic Growth: A Case Study of Pakistan*. Unpublished Master dissertation. University Utara Malaysia.
27. Hasnul, Al Gifari. (2015). *The effects of government expenditure on economic growth: The case of Malaysia*. MPRA Paper No. 71254, University Library of Munich, Germany.
28. Iftikhar, M., & Husnain, U. (2011). Keynes versus Wagner: Aggregated and disaggregated analysis of public expenditure in selected South Asian countries. *International Research Journal of Finance and Economics*, 67, 46–53.
29. Low, K. L., Low, B. C., Lim, W. F., & Goh, K. H. (2013). *Government expenditure components that affect economic growth*. Unpublished PhD dissertation, Universiti Tunku Abdul Rahman.
30. Manasseh CO, Abada FC, Okiche EL, Okanya O, Nwakoby IC, Offu P, et al. (2022) External debt and economic growth in Sub-Saharan Africa: Does governance matter?
31. Noraina Mazuan Sapuan & Nur Azura Sanusi. (2010, May). Assessing the effect of public social expenditure and human capital development on Malaysian economic growth: A bound testing approach, knowledge management. Paper presented at International Conference 2010, University Utara Malaysia.
32. Nurlina, N. (2015). The effect of government expenditures on Indonesian growth. *Journal of Economics, Business and Accountancy Ventura*, 18(1), 1-14,
33. Palmer, N. T. (2012). The importance of economic growth. *Certified Public Accountants, Ireland*, 6.
34. Rambeli, N., Ramli, B., Hashim, E., Affizah, D., & Marikan, A. (2016). Relationship between education expenditure, capital, labor force, and economic growth in Malaysia. *International Journal of Academic Research in Business and Social Sciences*, 6(12), 459–468.
35. Razak, S. N., & Ali, H. (2013), Sumbangan dan Kepentingan Pendidikan Tertiar dalam Pertumbuhan Ekonomi Negara: Satu Kajian Kes Di Malaysia. *Proceedings in the Eight, The Malaysian National Economic Conference (PERKEM)*, 2(806-816). Bangi, Malaysia: Universiti Kebangsaan Malaysia.
36. Smith, L. C. (2013). *The Great Indian calorie debate: Explaining rising undernourishment during India's rapid economic growth*. *IDS Working Papers*, 2013(430), 1-35.



37. Srinivasan, P. (2013). *Causality between public expenditure and economic growth: The Indian case*. *Int. Journal of Economics and Management*, 7(2), 335–347.
38. Stevan Gaber, Ilija Gruevski, and V. G. (2013). *The effects of discretionary fiscal policy on macroeconomic aggregates*. *Business and Economic Horizons (BEH)*, 9(1), 32–39.
39. Wang, C. F., & Tian, Y. (2015). *Reproductive endocrine-disrupting effects of triclosan: Population exposure, present evidence and potential mechanisms*. *Environmental Pollution*, 206, 195–201.