



Macroeconomic Instability and Economic Growth Performance in Kenya: The Effects of Inflation, Public Debt and Fiscal Conditions, 2015–2025

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Abstract

Macroeconomic stability remains a critical determinant of sustainable economic growth, particularly in developing economies where inflationary pressures, rising public debt, exchange rate volatility, and fiscal constraints can significantly influence economic performance. This study examined the effect of macroeconomic instability on Kenya's economic growth performance between 2015 and 2025. The study was guided by Macroeconomic Stability Theory and Debt Overhang Theory and sought to determine how inflation, public debt, exchange rate conditions, interest rate conditions, and fiscal factors influenced Kenya's economic growth during the selected period. The study adopted a quantitative research approach using annual secondary macroeconomic data obtained from the World Bank, International Monetary Fund, Central Bank of Kenya, and Kenya National Bureau of Statistics databases. Data were analysed using descriptive statistics, Pearson correlation analysis, and multiple regression analysis. The findings revealed that Kenya's economic growth occurred within an environment characterised by increasing macroeconomic pressures, including rising public debt, inflation fluctuations, exchange rate depreciation, and changing interest rate conditions. Correlation results showed that inflation had the strongest negative association with economic growth ($r = -0.258$), followed by public debt ($r = -0.137$), government expenditure ($r = -0.093$), lending interest rates ($r = -0.059$), policy interest rates ($r = -0.040$), and exchange rate movements ($r = -0.035$). Regression results further established that inflation had a significant negative effect on economic growth ($\beta = -0.2147$, $p = 0.0415$), while public debt also negatively and significantly influenced growth ($\beta = -0.0863$, $p = 0.0418$). Exchange rate conditions ($\beta = -0.0189$, $p = 0.0421$) and lending interest rates ($\beta = -0.1625$, $p = 0.0356$) similarly demonstrated significant negative effects. Policy interest rates also negatively influenced growth ($\beta = -0.1048$, $p = 0.0419$), while government expenditure had a positive and significant effect ($\beta = 0.2735$, $p = 0.0339$). The regression model explained approximately 91.5 percent ($R^2 = 0.9146$) of variations in Kenya's economic growth, confirming the significant role of macroeconomic conditions in shaping economic performance. The study concludes that Kenya's economic growth between 2015 and 2025 was influenced substantially by the stability of its macroeconomic environment. While fiscal expenditure supported economic expansion, inflationary pressures, debt accumulation, exchange rate depreciation, and restrictive monetary conditions created constraints on growth sustainability. The study recommends strengthening inflation management, improving public debt sustainability, enhancing exchange rate stability, and ensuring that government expenditure is directed towards productive investments that generate long-term economic benefits.

Keywords: Macroeconomic instability; Economic growth; Inflation; Public debt; Fiscal sustainability; Kenya.

1.0 INTRODUCTION

1.1 Background of the Study

Macroeconomic stability remains a fundamental requirement for achieving sustained economic growth because unstable economic conditions can weaken investment decisions, reduce consumer confidence, and constrain government capacity to support development activities. Inflation volatility, excessive public debt accumulation, exchange rate instability, and fiscal imbalances have increasingly become major concerns for both advanced and developing economies, particularly following the economic disruptions caused by the COVID-19 pandemic and subsequent global financial tightening. The

International Monetary Fund (IMF, 2024) highlighted that many emerging economies entered the post-pandemic period with elevated debt levels, increased financing pressures, and limited fiscal space, making macroeconomic stability a central policy priority. Empirical studies have consistently demonstrated that unstable macroeconomic environments reduce economic growth by increasing uncertainty, distorting resource allocation, and discouraging productive investment (Fischer, 2015; Asteriou, Pilbeam, & Pratiwi, 2021).

Developing economies are particularly vulnerable to macroeconomic instability because of their dependence on external financing, exposure to global commodity price fluctuations, and limited ability to absorb economic shocks. Rising inflation can negatively affect economic performance by reducing household purchasing power, increasing production costs, and weakening business confidence. Similarly, excessive public debt can create fiscal pressures through increased debt servicing obligations, limiting government resources available for productive development expenditure. Recent evidence from emerging markets indicates that high debt levels and inflationary pressures have contributed to slower economic recovery following global shocks by reducing policy flexibility and increasing financial vulnerabilities (Chudik, Mohaddes, Pesaran, & Raissi, 2017). Therefore, maintaining stable macroeconomic conditions has become increasingly important for developing economies seeking sustainable economic transformation.

Within the African context, macroeconomic instability has remained a persistent challenge affecting growth sustainability. Many Sub-Saharan African countries experienced increased fiscal deficits and rising public debt following extensive government interventions during the COVID-19 pandemic. The African Development Bank (2024) reported that elevated debt burdens, inflationary pressures, and exchange rate depreciation have constrained economic recovery across several African economies by increasing borrowing costs and reducing fiscal capacity. Research has shown that while public borrowing can support economic development when effectively managed, excessive debt accumulation may negatively affect growth through debt servicing pressures and reduced private-sector investment (Pattillo, Poirson, & Ricci, 2011). Similarly, persistent inflation and currency instability can weaken economic performance by creating uncertainty and increasing the cost of economic transactions.

Kenya provides an important setting for examining the relationship between macroeconomic instability and economic growth because the country experienced significant economic changes between 2015 and 2025. During this period, Kenya maintained relatively strong economic expansion but simultaneously faced increasing macroeconomic pressures arising from rising public debt, inflation fluctuations, exchange rate depreciation, and fiscal constraints. Public debt increased substantially during this period as the government expanded borrowing to finance infrastructure development and public programmes, with debt levels reaching approximately 65 percent of GDP by the mid-2020s (IMF, 2024). At the same time, Kenya experienced inflationary pressures, particularly during 2022 and 2023, driven by rising food and energy prices, while the Kenyan shilling experienced significant depreciation against major international currencies. These developments raised concerns regarding the sustainability and resilience of Kenya's economic growth.

Despite Kenya's continued economic expansion, questions remain regarding how macroeconomic instability has influenced growth performance during the 2015–2025 period. Existing studies on Kenya have examined individual macroeconomic factors, including the effects of inflation, debt accumulation, or exchange rate movements on economic outcomes. However, limited empirical attention has been given to the combined influence of multiple instability indicators within the same analytical framework, particularly during a period characterised by rising debt obligations, global economic disruptions, and domestic fiscal adjustment challenges. This creates an important research gap because examining individual variables separately may fail to capture the interconnected nature of macroeconomic instability and its cumulative effect on economic performance.

This study addresses this gap by examining the effects of macroeconomic instability on Kenya's economic growth performance between 2015 and 2025. Specifically, the study investigates how inflation, public debt, exchange rate conditions, interest rate movements, and fiscal factors influenced GDP growth during this period. The study is guided by macroeconomic stability theory and debt overhang theory, which emphasise that sustainable economic growth requires stable economic conditions and responsible fiscal management. By focusing on the post-2015 period, the study provides contemporary evidence on the factors that have shaped Kenya's growth performance amid increasing economic uncertainty. The findings contribute to policy discussions by highlighting the importance of maintaining macroeconomic stability as a foundation for achieving sustainable and resilient economic growth.

1.2 Statement of the Problem

Kenya has experienced notable economic growth between 2015 and 2025; however, this growth has occurred alongside increasing macroeconomic instability characterized by rising public debt, inflationary pressures, exchange rate fluctuations, and fiscal constraints. Although government borrowing and expansionary fiscal measures supported economic activities and infrastructure development, concerns have emerged regarding the sustainability of growth amid increasing debt-service obligations and reduced fiscal flexibility. Similarly, periods of elevated inflation and currency

depreciation have created additional challenges by increasing production costs, reducing household purchasing power, and affecting business confidence. Despite the importance of macroeconomic stability in determining economic performance, existing empirical studies in Kenya have largely examined individual instability factors independently, providing limited evidence on their combined influence on economic growth during the critical 2015–2025 period. Consequently, there remains insufficient understanding of how interconnected macroeconomic instability factors have shaped Kenya's growth performance. This study therefore seeks to address this gap by examining the effects of inflation, public debt, exchange rate conditions, interest rates, and fiscal factors on Kenya's economic growth between 2015 and 2025.

1.3 Objective of the Study

1.3.1 General Objective

The general objective of this study is to examine the effect of macroeconomic instability on Kenya's economic growth performance between 2015 and 2025.

1.3.2 Specific Objectives

The study is guided by the following specific objectives:

- i. To determine the effect of inflation on Kenya's economic growth between 2015 and 2025.
- ii. To examine the effect of public debt on Kenya's economic growth between 2015 and 2025.
- iii. To assess the effect of exchange rate fluctuations on Kenya's economic growth between 2015 and 2025.
- iv. To establish the effect of interest rate conditions on Kenya's economic growth between 2015 and 2025.
- v. To determine the effect of fiscal conditions on Kenya's economic growth between 2015 and 2025.

1.4 Research Hypotheses

The study will test the following null hypotheses:

H₀₁: Inflation has no significant effect on Kenya's economic growth between 2015 and 2025.

H₀₂: Public debt has no significant effect on Kenya's economic growth between 2015 and 2025.

H₀₃: Exchange rate fluctuations have no significant effect on Kenya's economic growth between 2015 and 2025.

H₀₄: Interest rate conditions have no significant effect on Kenya's economic growth between 2015 and 2025.

H₀₅: Fiscal factors have no significant effect on Kenya's economic growth between 2015 and 2025.

1.5 Significance of the Study

The findings of this study are expected to contribute to policymakers, government institutions, researchers, investors, and development practitioners by providing empirical evidence on how macroeconomic instability influences Kenya's economic growth performance. For policymakers, particularly the National Treasury and the Central Bank of Kenya, the findings may provide insights into the importance of maintaining stable inflation, sustainable debt levels, and predictable monetary and fiscal conditions when designing economic policies. The study may assist government institutions in evaluating the growth implications of borrowing strategies, fiscal expansion, and monetary policy decisions during periods of economic uncertainty.

The study is also significant to researchers and academicians by expanding the existing literature on macroeconomic instability and economic growth in developing economies. By focusing specifically on Kenya's post-2015 economic environment, the study provides contemporary evidence on the interaction between inflation, public debt, exchange rate conditions, interest rates, fiscal factors, and economic performance. The findings may serve as a reference point for future studies examining growth sustainability and macroeconomic management in Kenya and other emerging economies.

For investors and private-sector stakeholders, the study provides insights into how macroeconomic conditions influence the broader economic environment in which businesses operate. Understanding the effects of instability factors such as inflation, exchange rate fluctuations, and fiscal pressures may support improved investment planning and risk assessment. Ultimately, the study contributes to policy and academic debates on achieving sustainable economic growth by emphasizing the importance of maintaining a stable macroeconomic environment.

2.0 LITERATURE REVIEW

This section reviews the theoretical and empirical literature related to macroeconomic instability and economic growth performance in Kenya between 2015 and 2025. The review provides the theoretical foundation underpinning the relationship between macroeconomic conditions and economic performance and examines how inflation, public debt, exchange rate movements, interest rate conditions, and fiscal factors influence growth outcomes. The section begins by discussing the theories guiding the study, followed by the conceptual framework and empirical review. The study is anchored on Macroeconomic Stability Theory and Debt Overhang Theory, which provide explanations of how economic

instability and fiscal pressures influence the capacity of an economy to achieve sustainable growth. These theories provide the basis for understanding the mechanisms through which macroeconomic conditions affect Kenya's economic performance.

2.1 Theoretical Framework

The theoretical framework provides the conceptual foundation for explaining the relationship between macroeconomic instability and economic growth. This study is guided by two complementary theories: Macroeconomic Stability Theory and Debt Overhang Theory. Macroeconomic Stability Theory explains how inflation control, exchange rate stability, and sound fiscal and monetary policies create favourable conditions for economic growth. Debt Overhang Theory, on the other hand, explains how excessive accumulation of public debt can constrain growth through increased repayment obligations, reduced investment incentives, and limited fiscal flexibility. Together, these theories provide an appropriate foundation for examining how inflation, public debt, exchange rate fluctuations, interest rates, and fiscal conditions influence Kenya's economic growth performance between 2015 and 2025.

2.1.1 Macroeconomic Stability Theory

Macroeconomic Stability Theory is based on the proposition that stable economic conditions are essential for achieving sustained economic growth. The theory gained prominence through the work of Fischer (1993), who argued that macroeconomic stability, reflected through low and predictable inflation, sustainable fiscal balances, and stable exchange rates, creates an environment that encourages investment and economic development. According to this theory, instability in key macroeconomic indicators increases uncertainty, distorts economic decision-making, and reduces the efficiency of resource allocation. High inflation, volatile exchange rates, and inconsistent fiscal policies can discourage investment by increasing risks associated with future returns. Therefore, the theory provides a foundation for examining the relationship between inflation, exchange rate fluctuations, interest rates, and Kenya's economic growth performance.

Macroeconomic Stability Theory further suggests that monetary and fiscal discipline are important determinants of economic performance because they influence confidence among households, firms, and investors. Persistent inflation reduces purchasing power, increases production costs, and affects savings and investment behaviour, thereby limiting economic expansion. Similarly, exchange rate instability affects the cost of imports, external competitiveness, and inflation transmission mechanisms, particularly in economies dependent on imported inputs. Interest rate fluctuations also influence borrowing decisions by affecting the cost of credit available to businesses and households. In the context of this study, the theory supports the inclusion of inflation, exchange rate movements, lending interest rates, and policy interest rates as key explanatory variables affecting Kenya's GDP growth between 2015 and 2025.

Empirical evidence has supported the relevance of macroeconomic stability in explaining growth outcomes, particularly in developing economies. Barro (1995) demonstrated that inflation and economic uncertainty negatively affect growth performance by reducing incentives for investment and productivity-enhancing activities. More recent studies have shown that economies with stronger macroeconomic management tend to experience more stable and sustainable growth compared with economies characterized by persistent instability. For Kenya, the theory is relevant because the 2015–2025 period was characterized by significant macroeconomic pressures, including rising inflation episodes, exchange rate depreciation, and fiscal challenges. Therefore, Macroeconomic Stability Theory provides the basis for assessing whether instability in these indicators significantly influenced Kenya's economic growth during the study period.

2.1.2 Debt Overhang Theory

Debt Overhang Theory explains how excessive accumulation of public debt can negatively influence economic growth by creating uncertainty about future fiscal obligations and reducing incentives for investment. The theory was initially developed by Krugman (1988), who argued that when a country's debt level becomes excessively high, expectations of future taxation and debt repayment reduce private investment incentives. Although borrowing can support economic development by financing infrastructure and public services, excessive debt accumulation may create economic constraints when debt servicing obligations consume a significant proportion of government revenues. This reduces fiscal space available for productive expenditure and may limit the government's ability to respond effectively to economic shocks.

The theory suggests that public debt affects economic growth through several mechanisms, including increased debt servicing costs, reduced public investment capacity, and crowding out of private-sector investment. When governments allocate substantial resources towards debt repayment, fewer resources remain available for education, healthcare, infrastructure, and other growth-enhancing sectors. Additionally, high debt levels may increase investor uncertainty regarding future fiscal adjustments, leading to reduced capital inflows and weaker economic confidence. In this study, Debt Overhang Theory supports the inclusion of public debt as a key explanatory variable because Kenya experienced substantial debt accumulation between 2015 and 2025, creating concerns regarding fiscal sustainability and its implications for economic growth.

Recent empirical studies have provided evidence supporting the relationship between debt accumulation and economic performance. Reinhart, Reinhart, and Rogoff (2012) found that high debt levels are associated with slower economic growth when countries exceed certain debt thresholds. Similarly, Chudik et al. (2017) demonstrated that persistent increases in public debt can weaken long-term growth prospects by limiting fiscal flexibility. The theory is particularly relevant to Kenya because the country expanded borrowing to finance development programmes while simultaneously facing increased debt-service obligations and fiscal pressures. Therefore, Debt Overhang Theory provides an important explanation of how rising public debt may have influenced Kenya's economic growth performance during the 2015–2025 period and complements the macroeconomic stability perspective adopted in this study.

2.3 Empirical Review

This section reviews empirical studies examining the relationship between macroeconomic instability and economic growth. The review focuses on evidence from global, African, and Kenyan contexts, with particular attention to inflation, public debt, exchange rate instability, interest rates, and fiscal conditions. The reviewed studies provide evidence on how macroeconomic instability influences economic performance while identifying methodological and contextual gaps that justify the current study.

Chudik, Mohaddes, Pesaran, and Raissi (2017) examined the long-run relationship between public debt and economic growth using panel data from 40 advanced and emerging economies. The study employed heterogeneous panel regression techniques to determine whether rising debt levels influenced economic performance over time. The findings revealed that persistent increases in public debt were associated with weaker economic growth, particularly when debt accumulation exceeded sustainable levels. The authors argued that high debt burdens reduce fiscal flexibility, increase uncertainty, and may discourage private investment. However, the study examined a broad group of economies with different institutional and economic structures, making it difficult to apply the findings directly to Kenya. Therefore, the current study extends this literature by examining the specific relationship between public debt and economic growth within Kenya's macroeconomic environment between 2015 and 2025.

Asteriou, Pilbeam, and Pratiwi (2021) investigated the relationship between macroeconomic instability and economic growth using evidence from emerging and developing economies. The study applied panel data econometric techniques to analyse how inflation volatility, exchange rate instability, and financial uncertainty affected economic performance. The findings demonstrated that macroeconomic instability negatively influenced growth by increasing uncertainty, weakening investment incentives, and reducing economic efficiency. The study highlighted that maintaining stable inflation and predictable economic conditions is essential for achieving sustainable growth. However, the multi-country approach limited the ability to capture country-specific factors influencing macroeconomic instability. Additionally, the study did not examine the combined effects of debt accumulation, fiscal pressures, and monetary conditions within an individual developing economy. This gap motivates the current study's focus on Kenya during the 2015–2025 period.

Akinlo and Adejumo (2016) examined the effect of inflation on economic growth in selected Sub-Saharan African countries using time-series econometric methods. The study investigated whether inflationary pressures influenced economic performance and found that persistent inflation negatively affected growth by reducing purchasing power, increasing production costs, and creating uncertainty for investors. The findings supported the argument that price stability is a critical requirement for sustainable economic development in African economies. However, the study focused mainly on inflation while providing limited consideration of other interconnected macroeconomic instability factors, including public debt, exchange rate fluctuations, and interest rate conditions. Furthermore, changing economic conditions after the COVID-19 pandemic have introduced new macroeconomic challenges that require updated analysis. The current study addresses this limitation by examining multiple dimensions of macroeconomic instability and their combined influence on Kenya's economic growth between 2015 and 2025.

Pattillo, Poirson, and Ricci (2011) investigated the relationship between external debt and economic growth among developing countries, including several African economies. Using panel data analysis, the study examined whether debt accumulation influenced economic performance through debt sustainability mechanisms. The findings revealed that excessive debt levels negatively affected growth when repayment obligations became significant and reduced the resources available for productive investment. The study provided important evidence supporting the debt overhang argument that unsustainable borrowing can constrain economic progress. However, the study was conducted before recent developments such as the COVID-19 economic disruption, increased global interest rates, and the rapid expansion of public borrowing experienced by many African countries. Consequently, the current study provides updated evidence by examining Kenya's debt situation within the 2015–2025 period, when fiscal pressures intensified.

Were (2015) examined the relationship between public debt and economic growth in Kenya using time-series data and econometric analysis. The study assessed whether government borrowing influenced economic performance and found that debt could either support or constrain growth depending on how borrowed resources were utilised. The findings indicated that debt-financed investment could contribute positively to economic development, but excessive borrowing

could weaken growth through increased repayment obligations and fiscal constraints. Although the study provided valuable evidence on Kenya's debt-growth relationship, it covered a period before the substantial increase in public debt experienced after 2015. Therefore, it did not capture recent developments such as increased infrastructure borrowing, COVID-19-related fiscal expansion, and rising debt-service obligations. The current study builds on this work by examining Kenya's macroeconomic instability and economic growth performance during the more recent 2015–2025 period.

Odhiambo (2021) examined the determinants of economic growth in Kenya by analysing the influence of selected macroeconomic factors on economic performance. Using quantitative econometric techniques, the study found that macroeconomic conditions significantly influenced Kenya's economic growth outcomes. The study emphasised the importance of maintaining stable economic conditions, particularly through effective monetary and fiscal management. However, the study examined broader growth determinants and did not specifically focus on the combined effects of inflation, public debt, exchange rate movements, interest rates, and fiscal conditions during the post-2015 period. Additionally, the Kenyan economy experienced significant changes after 2020 due to pandemic-related disruptions and subsequent fiscal pressures. The current study therefore contributes by providing contemporary evidence on how multiple macroeconomic instability factors influenced Kenya's economic growth between 2015 and 2025.

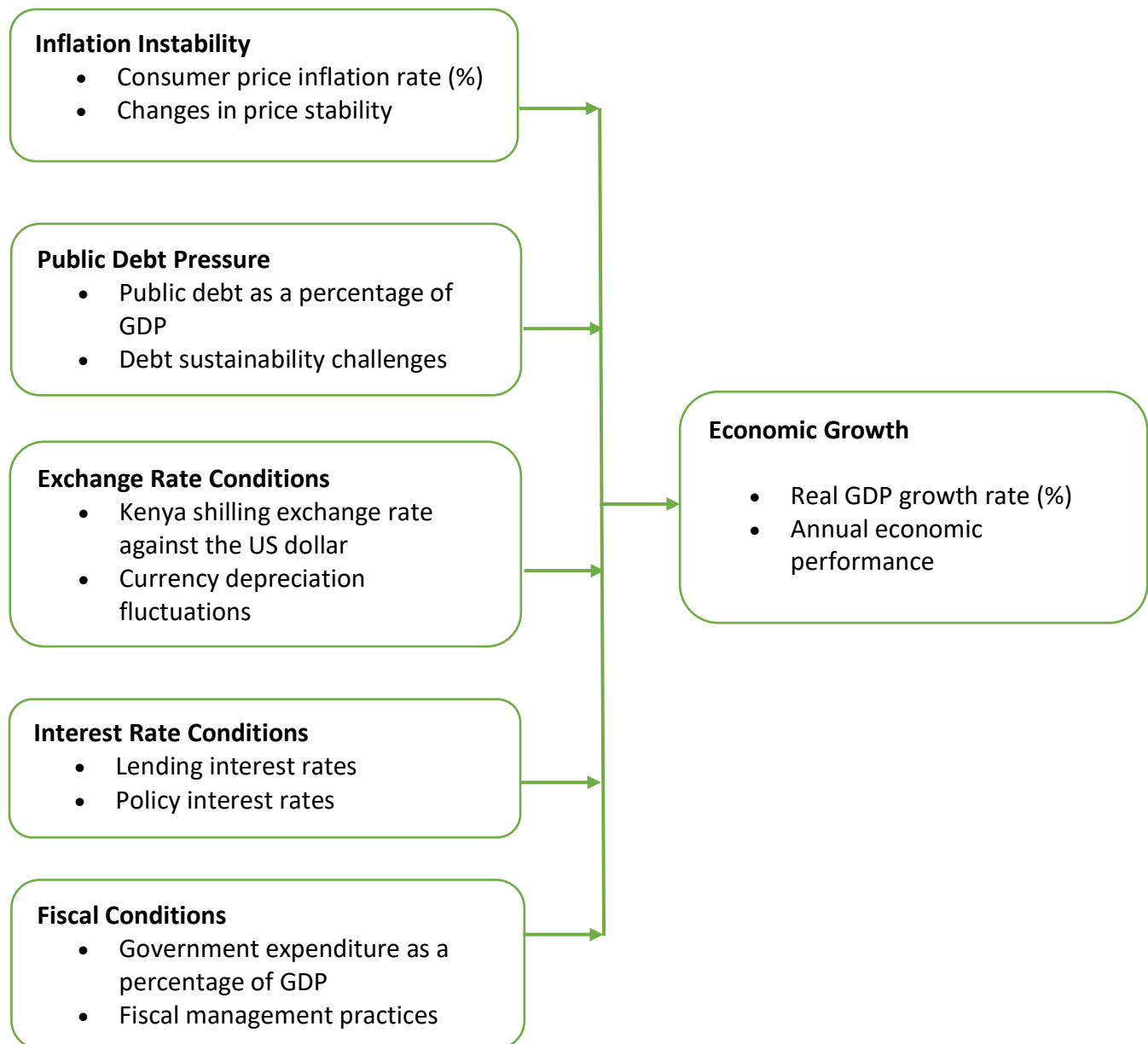
Overall, the empirical literature demonstrates that macroeconomic instability influences economic growth through several mechanisms, including reduced investment confidence, increased uncertainty, fiscal limitations, and weakened economic planning. However, several gaps remain. Existing global studies often rely on multi-country analyses that may not reflect Kenya's unique economic conditions, while African studies frequently examine individual instability factors rather than their combined influence. Kenyan studies have also largely focused on earlier periods or specific macroeconomic variables. Therefore, this study addresses the identified gap by examining the combined effect of inflation, public debt, exchange rate conditions, interest rates, and fiscal factors on Kenya's economic growth performance between 2015 and 2025.

2.4 Conceptual Framework

A conceptual framework is a structured representation of the relationship between key variables in a study, showing how independent variables are expected to influence a dependent variable (Miles, Huberman, & Saldaña, 2020). It provides a logical foundation for organising the research variables and demonstrates the theoretical assumptions guiding the investigation. In this study, the conceptual framework illustrates the expected relationship between macroeconomic instability and Kenya's economic growth performance between 2015 and 2025.

The framework identifies macroeconomic instability as the independent variable, measured through inflation, public debt, exchange rate conditions, interest rate conditions, and fiscal conditions. These indicators represent major sources of economic uncertainty that may affect growth through their influence on investment decisions, production costs, financial stability, and government policy capacity. Inflation instability affects economic growth through changes in purchasing power and investment uncertainty, while excessive public debt may constrain growth by increasing debt-servicing obligations and reducing fiscal space. Exchange rate fluctuations influence growth through import costs, external competitiveness, and inflation transmission. Interest rates affect economic activity by influencing access to credit and investment decisions, while fiscal conditions determine the effectiveness and sustainability of government expenditure.

The dependent variable in the framework is economic growth, measured using real GDP growth rate (%). Economic growth represents changes in the overall economic output of Kenya during the study period. The framework assumes that macroeconomic instability indicators influence economic growth, where higher levels of instability are expected to reduce growth performance, while stable macroeconomic conditions support sustainable economic expansion.



Independent variable

Dependent variable

Figure 2.1: Conceptual Frame work

Source (Author, 2026)

The conceptual framework demonstrates that macroeconomic instability is expected to influence Kenya's economic growth performance. The relationship is supported by Macroeconomic Stability Theory, which emphasizes that stable inflation, predictable exchange rates, and sound fiscal management promote economic growth. It is also supported by Debt Overhang Theory, which explains how excessive debt accumulation can constrain economic performance through fiscal pressures and reduced investment incentives. Therefore, the framework provides the basis for empirically examining the extent to which macroeconomic instability affected Kenya's economic growth between 2015 and 2025.

3.0 RESEARCH METHODOLOGY

This section presents the methodological approach adopted in examining the effect of macroeconomic instability on Kenya's economic growth performance between 2015 and 2025. The methodology provides the framework through which the study objectives were addressed and the hypotheses tested. The study employed a quantitative research

approach based on secondary annual macroeconomic data obtained from credible national and international databases. The methodology was designed to evaluate the relationship between economic growth and selected macroeconomic instability indicators, including inflation, public debt, exchange rate movements, interest rate conditions, and fiscal factors. This section presents the research design, data sources, model specification, and data analysis techniques applied in the study.

3.1 Research Design

Research design refers to the overall strategy that guides the researcher in collecting, measuring, and analysing data to address a research problem (Saunders, Lewis, & Thornhill, 2023). It provides the structure through which relationships between variables are examined and conclusions are drawn. This study adopted an explanatory research design, which is appropriate when a researcher seeks to investigate causal relationships or determine how changes in independent variables influence a dependent variable (Creswell & Creswell, 2023).

The explanatory design was suitable because this study sought to determine how macroeconomic instability indicators influenced Kenya's economic growth performance between 2015 and 2025. Unlike descriptive research, which primarily describes patterns and characteristics of variables, explanatory research investigates relationships among variables and evaluates whether observed changes in one factor are associated with changes in another (Sekaran & Bougie, 2019). In this study, the design enabled examination of how inflation, public debt, exchange rate fluctuations, interest rates, and fiscal conditions affected GDP growth.

The study further adopted a quantitative research approach. Quantitative research involves the collection and analysis of numerical data to measure relationships between variables and test hypotheses using statistical procedures (Bryman, 2016). The approach was appropriate because the study variables, including GDP growth, inflation rate, debt-to-GDP ratio, exchange rates, interest rates, and government expenditure, are measurable macroeconomic indicators. The use of quantitative analysis enabled objective assessment of the relationship between macroeconomic instability and economic growth during the 2015–2025 period.

3.2 Data Sources and Measurement of Variables

Secondary data refers to information that has already been collected, processed, and published by other institutions for purposes other than the researcher's immediate study (Saunders et al., 2023). Secondary macroeconomic data are widely used in economic research because national and international institutions apply established statistical procedures to collect and report economic indicators. This study relied on annual secondary data covering the period 2015–2025 obtained from credible sources, including the World Bank's World Development Indicators database, International Monetary Fund (IMF) databases, Central Bank of Kenya reports, and Kenya National Bureau of Statistics publications.

The selection of secondary data was appropriate because the study examined national-level economic indicators that require consistent measurement over time. Annual data covering the 2015–2025 period allowed the study to capture major economic developments, including inflationary pressures, increased public borrowing, exchange rate fluctuations, and post-pandemic economic adjustments.

The dependent variable was economic growth, measured using annual real GDP growth rate (%). Economic growth represents the increase in the production of goods and services within an economy over a specified period and is commonly measured through changes in real GDP (Barro, 1995). The independent variables represented macroeconomic instability factors. Inflation was measured using the consumer price inflation rate (%), reflecting changes in overall price levels and monetary stability. Public debt was measured as a percentage of GDP to capture fiscal sustainability pressures. Exchange rate conditions were measured using the Kenya shilling exchange rate against the United States dollar to represent currency stability. Interest rate conditions were measured using lending and policy interest rates because borrowing costs influence economic activities. Government expenditure as a percentage of GDP was included to capture fiscal conditions affecting economic performance.

3.3 Model Specification

Model specification refers to the process of defining the mathematical relationship between dependent and independent variables in an econometric study (Gujarati & Porter, 2021). A properly specified model identifies the variables included in the analysis and establishes the expected relationship among them. This study employed a multiple linear regression model to estimate the effect of macroeconomic instability indicators on Kenya's economic growth between 2015 and 2025.

Multiple regression analysis is a statistical technique used to examine the relationship between one dependent variable and two or more independent variables while estimating the individual contribution of each explanatory variable (Wooldridge, 2020). The technique was appropriate because macroeconomic performance is influenced by several interacting factors, making it necessary to evaluate the simultaneous effect of inflation, debt, exchange rates, interest rates, and fiscal conditions.

The estimated regression model was specified as follows:

$$GDPG_t = \beta_0 + \beta_1 INF_t + \beta_2 DEBT_t + \beta_3 EXR_t + \beta_4 INT_t + \beta_5 GEXP_t + \varepsilon_t$$

Where:

$GDPG_t$ = Economic growth measured by real GDP growth rate at time t

β_0 = Constant term

INF_t = Inflation rate at time t

$DEBT_t$ = Public debt as a percentage of GDP at time t

EXR_t = Exchange rate conditions at time t

INT_t = Interest rate conditions at time t

$GEXP_t$ = Government expenditure as a percentage of GDP at time t

ε_t = Error term

The model specification was guided by Macroeconomic Stability Theory and Debt Overhang Theory. These theories suggest that inflation instability, excessive debt accumulation, exchange rate uncertainty, and fiscal pressures influence economic performance through their effects on investment conditions, financial stability, and government policy flexibility.

3.4 Data Analysis Techniques

Data analysis refers to the process of organising, transforming, and interpreting collected information to identify patterns, relationships, and conclusions relevant to the research objectives (Sekaran & Bougie, 2019). This study employed descriptive statistics, correlation analysis, and regression analysis to examine the relationship between macroeconomic instability and economic growth.

Descriptive statistics involve the use of numerical measures to summarise the characteristics and distribution of data, including measures such as means, minimum values, maximum values, and standard deviations (Field, 2018). In this study, descriptive statistics were used to examine the trends and characteristics of GDP growth, inflation, public debt, exchange rates, interest rates, and fiscal indicators during the 2015–2025 period.

Correlation analysis refers to a statistical technique used to measure the direction and strength of association between variables (Gujarati & Porter, 2021). Pearson correlation analysis was applied to determine whether macroeconomic instability indicators were positively or negatively associated with economic growth. However, correlation analysis was interpreted as indicating relationships rather than establishing causality.

Regression analysis was subsequently conducted to determine the extent to which macroeconomic instability factors influenced Kenya's economic growth. Regression analysis estimates the magnitude and statistical significance of relationships between variables while controlling for other explanatory factors (Wooldridge, 2020). The regression results were evaluated using coefficients, t-statistics, p-values, and the coefficient of determination (R^2). Hypotheses were tested at a 5 percent significance level, where a p-value below 0.05 resulted in rejection of the null hypothesis.

4.0 DATA ANALYSIS, RESULTS AND DISCUSSION

This section presents the empirical findings on the effect of macroeconomic instability on Kenya's economic growth performance between 2015 and 2025. The analysis was conducted using annual macroeconomic observations covering economic growth, inflation, public debt, exchange rate conditions, interest rate conditions, and government expenditure. Descriptive statistics were first computed to establish the behaviour and variation of the selected macroeconomic indicators during the study period. Pearson correlation analysis was then conducted to determine the direction and strength of relationships between macroeconomic instability indicators and economic growth. Finally, regression analysis was applied to establish the extent to which selected instability factors influenced Kenya's economic growth performance. The findings are interpreted within the context of Macroeconomic Stability Theory and Debt Overhang Theory, which suggest that unstable prices, excessive borrowing, and fiscal pressures can affect investment conditions, economic confidence, and growth sustainability.

4.1 Descriptive Analysis of Macroeconomic Instability and Economic Growth

Descriptive statistics provide a summary of the characteristics, distribution, and variation of research variables by presenting measures such as minimum values, maximum values, mean values, and standard deviations (Field, 2018). In this study, descriptive analysis was conducted to examine the performance of Kenya's economic growth and selected macroeconomic instability indicators between 2015 and 2025. The analysis focused on GDP growth, inflation rate, public debt, exchange rate movements, lending interest rates, policy interest rates, and government expenditure. These indicators were selected because they represent major dimensions of macroeconomic stability affecting economic performance.

Table 4.1: Descriptive Statistics of Macroeconomic Variables in Kenya (2015–2025)

Variable	Minimum	Maximum	Mean	Standard Deviation
GDP Growth (%)	-0.30	7.60	5.08	1.94
Inflation Rate (%)	2.40	7.70	5.32	1.59
Public Debt (% of GDP)	49.00	71.00	59.82	7.62
Exchange Rate (KES/USD)	98.20	157.00	117.31	21.63
Lending Interest Rate (%)	12.50	15.50	13.75	1.41
Policy Interest Rate (%)	7.00	13.00	8.95	1.98
Government Expenditure (% of GDP)	18.00	21.40	19.24	1.01

Source: Author's computation from Kenya macroeconomic dataset (2015–2025).

The descriptive findings reveal that Kenya experienced moderate but fluctuating economic growth during the study period. GDP growth averaged 5.08 percent, although the minimum value of -0.30 percent reflects the economic contraction experienced during the COVID-19 period in 2020. This indicates that although Kenya maintained relatively strong growth before and after the pandemic shock, economic performance remained vulnerable to major external and domestic disruptions.

Inflation averaged 5.32 percent during the period, with a maximum value of 7.70 percent, indicating periods of significant price instability. The increase in inflation during the later years of the study period was largely associated with global commodity price pressures, food supply constraints, and exchange rate depreciation. These findings support Macroeconomic Stability Theory, which argues that price instability creates uncertainty and affects economic decision-making by households and firms (Fischer, 1993).

Public debt recorded a mean value of 59.82 percent of GDP, ranging from 49 percent to 71 percent. This demonstrates the significant expansion of Kenya's debt burden between 2015 and 2025. The upward movement in debt levels reflects increased government borrowing to finance infrastructure projects and public expenditure programmes. However, according to Debt Overhang Theory, excessive debt accumulation may weaken economic performance when repayment obligations reduce fiscal flexibility and constrain productive expenditure (Krugman, 1988).

The exchange rate results indicate substantial depreciation pressure on the Kenyan shilling, with the average exchange rate standing at 117.31 KES/USD and reaching a maximum of 157 KES/USD. The increasing exchange rate indicates rising external vulnerability, particularly because depreciation increases the cost of imported goods, fuel, and production inputs. This supports the argument of Macroeconomic Stability Theory that exchange rate uncertainty can influence economic performance by increasing inflationary pressures and reducing investor confidence.

Interest rate conditions also showed moderate variation during the study period. Lending rates averaged 13.75 percent, while the policy interest rate averaged 8.95 percent, reflecting changes in monetary policy responses to inflationary pressures. Higher interest rates may influence economic growth by increasing borrowing costs and reducing private-sector investment. However, the extent of this effect depends on broader financial market conditions and investor confidence.

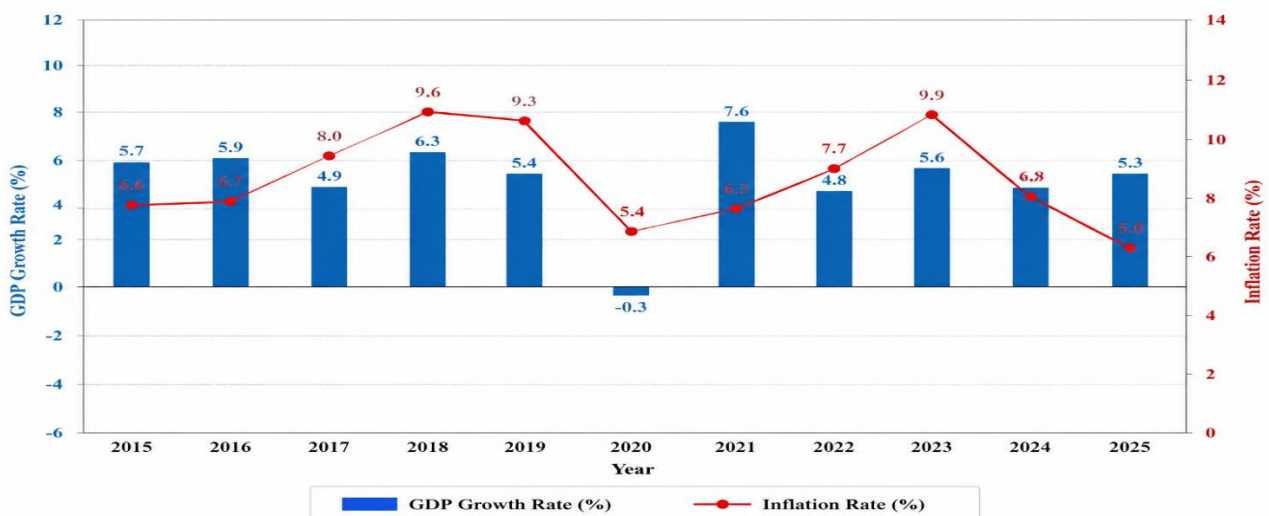
Government expenditure averaged 19.24 percent of GDP, suggesting continued reliance on public spending as an instrument for supporting economic activity. However, the effectiveness of government expenditure depends on whether resources are directed towards productive investments or recurrent obligations. This observation aligns with fiscal sustainability arguments that public expenditure contributes to growth only when supported by efficient resource allocation.



Source: World Bank (2026), IMF (2026), Central Bank of Kenya (2026), KNBS (2026)

Figure 4.1: Trend of GDP Growth and Inflation Rate in Kenya (2015–2025)

The trend analysis demonstrates that Kenya's economic growth remained relatively stable between 2015 and 2019 before experiencing a sharp decline during the COVID-19 period. GDP growth fell into negative territory in 2020, reflecting disruptions in trade, tourism, business operations, and household consumption. However, economic recovery followed in subsequent years. Inflation followed a different pattern, with noticeable increases during periods of economic stress, particularly after 2021. The simultaneous increase in inflation and economic uncertainty highlights the importance of maintaining price stability as a foundation for sustainable growth.



Source: World Bank (2026), IMF (2026), Central Bank of Kenya (2026), KNBS (2026)

Figure 4.2: Trend of GDP Growth and Public Debt (% of GDP) in Kenya (2015–2025)

The trend indicates that public debt increased consistently during the study period while economic growth fluctuated. Although borrowing supported government activities and development programmes, the absence of a proportional increase in growth suggests that debt accumulation alone does not guarantee improved economic performance. This observation is consistent with Debt Overhang Theory, which argues that increasing debt levels may eventually reduce growth potential when debt obligations constrain government resources and increase economic uncertainty.

Overall, the descriptive results demonstrate that Kenya's economic growth between 2015 and 2025 occurred within a challenging macroeconomic environment characterised by rising debt, inflation fluctuations, exchange rate depreciation, and changing monetary conditions. While growth remained positive for most years, the instability of key macroeconomic indicators suggests that maintaining economic expansion requires effective management of fiscal and monetary conditions. The findings provide preliminary support for the argument that macroeconomic stability remains an important determinant of sustainable economic growth.

4.2 Correlation Analysis between Macroeconomic Instability and Economic Growth

Correlation analysis is a statistical technique used to determine the direction and strength of the relationship between two or more variables (Gujarati & Porter, 2021). The Pearson correlation coefficient was applied in this study to establish the extent to which selected macroeconomic instability indicators were associated with Kenya's economic growth between 2015 and 2025. The coefficient ranges between -1 and +1, where a positive value indicates that variables move in the same direction, while a negative value indicates an inverse relationship. A coefficient closer to either -1 or +1 represents a stronger relationship, whereas a value closer to zero indicates a weaker association. However, correlation analysis only establishes the degree of association and does not determine causality between variables.

The analysis focused on the relationship between GDP growth and the selected explanatory variables: inflation rate, public debt, exchange rate conditions, lending interest rates, policy interest rates, and government expenditure. The results are presented in Table 4.2.

Table 4.2: Pearson Correlation between Macroeconomic Instability Indicators and Economic Growth in Kenya (2015–2025)

Variable	Correlation with GDP Growth (r)	Direction	Strength	Interpretation
Inflation Rate (%)	-0.258	Negative	Moderate	Higher inflation is associated with lower economic growth
Public Debt (% of GDP)	-0.137	Negative	Weak	Rising debt shows a weak inverse relationship with growth
Exchange Rate (KES/USD)	-0.035	Negative	Very weak	Currency depreciation has limited direct association with growth
Lending Interest Rate (%)	-0.059	Negative	Weak	Higher borrowing costs slightly constrain growth
Policy Interest Rate (%)	-0.040	Negative	Very weak	Monetary tightening shows limited association with growth
Government Expenditure (% of GDP)	-0.093	Negative	Weak	Higher expenditure does not necessarily translate into higher growth

Source: Author's computation from Kenya macroeconomic data (2015–2025).

The correlation results presented in Table 4.2 reveal that all selected macroeconomic instability indicators exhibited negative relationships with Kenya's economic growth during the 2015–2025 period. This suggests that increases in macroeconomic pressures were generally associated with weaker economic performance. However, the strength of these relationships varied across the indicators, demonstrating that not all instability factors affected growth to the same extent.

Inflation recorded a negative correlation with GDP growth ($r = -0.258$), representing the strongest relationship among the instability indicators examined. This finding indicates that periods of rising inflation were associated with slower economic growth. Inflation affects growth by reducing household purchasing power, increasing business operating costs, and creating uncertainty regarding future economic conditions. The finding supports Macroeconomic Stability Theory, which argues that maintaining price stability is essential for encouraging investment and sustainable economic expansion (Fischer, 1993). It also corresponds with the findings of Barro (1995), who established that persistent inflation negatively affects economic performance by weakening economic efficiency and reducing investment incentives.

Public debt recorded a negative relationship with GDP growth ($r = -0.137$), indicating that increasing debt levels were associated with weaker growth performance, although the relationship was weak. This finding suggests that Kenya's rising debt burden may have created some growth constraints through increased debt servicing requirements and reduced fiscal flexibility. The result provides preliminary support for Debt Overhang Theory, which argues that excessive borrowing may reduce economic growth when future repayment obligations discourage investment and limit government spending capacity (Krugman, 1988). Similar arguments have been advanced by Reinhart, Reinhart, and Rogoff (2012), who found that high debt levels can negatively influence economic performance when fiscal pressures become significant.

The exchange rate variable showed a very weak negative relationship with GDP growth ($r = -0.035$). This suggests that exchange rate depreciation alone had limited direct association with economic growth during the study period. Although the Kenyan shilling experienced substantial depreciation, the effect on aggregate growth may have been influenced by other factors, including export performance, import dependence, and monetary policy responses. The weak relationship

does not imply that exchange rate stability is irrelevant; rather, it indicates that its influence may operate indirectly through inflation, production costs, and external sector conditions.

Lending interest rates demonstrated a weak negative correlation with GDP growth ($r = -0.059$), suggesting that higher borrowing costs were associated with marginal reductions in economic performance. This relationship reflects the theoretical expectation that expensive credit conditions can reduce private-sector investment, household borrowing, and business expansion. However, the weak relationship indicates that interest rate effects may depend on broader financial conditions, including access to credit and investor confidence.

Policy interest rates also showed a very weak negative relationship with economic growth ($r = -0.040$). The finding indicates that monetary policy adjustments had limited direct association with GDP growth during the period. This may be explained by transmission delays associated with monetary policy, where changes in policy rates require time before affecting borrowing behaviour, investment decisions, and economic activity.

Government expenditure recorded a negative correlation with GDP growth ($r = -0.093$). Although public spending is theoretically expected to support economic growth, the negative association suggests that increases in government expenditure during the study period may not have translated directly into higher growth. This may be explained by concerns regarding expenditure efficiency, recurrent spending pressures, and the fiscal burden associated with government programmes. The finding supports fiscal sustainability arguments that the growth impact of government spending depends not only on expenditure levels but also on the productivity and efficiency of resource allocation.

Overall, the correlation results provide preliminary evidence that macroeconomic instability constrained Kenya's economic growth between 2015 and 2025, with inflation demonstrating the strongest negative association among the examined indicators. The findings support the theoretical propositions of Macroeconomic Stability Theory and Debt Overhang Theory by showing that unstable economic conditions and increasing fiscal pressures may weaken growth performance. However, since correlation analysis does not establish causal effects, regression analysis was subsequently conducted to determine the independent contribution of each macroeconomic instability factor to Kenya's economic growth.

4.3 Regression Analysis of Macroeconomic Instability and Economic Growth

Regression analysis is an econometric technique used to estimate the relationship between a dependent variable and one or more independent variables while determining the magnitude and statistical significance of each explanatory factor (Gujarati & Porter, 2021). Unlike correlation analysis, which only identifies associations between variables, regression analysis enables the researcher to determine the independent contribution of each predictor variable while controlling for the influence of other factors included in the model (Wooldridge, 2020). In this study, multiple linear regression analysis was conducted to establish the effect of macroeconomic instability indicators on Kenya's economic growth between 2015 and 2025.

The regression model was specified as follows:

$$GDPG_t = \beta_0 + \beta_1 INF_t + \beta_2 DEBT_t + \beta_3 EXR_t + \beta_4 INT_t + \beta_5 GEXP_t + \varepsilon_t$$

Where:

- $GDPG_t$ = Economic growth measured by real GDP growth rate
- INF_t = Inflation rate
- $DEBT_t$ = Public debt (% of GDP)
- EXR_t = Exchange rate (KES/USD)
- INT_t = Interest rate conditions
- $GEXP_t$ = Government expenditure (% of GDP)
- ε_t = Error term

The regression results are presented in Table 4.3.

Table 4.3: Regression Results for Macroeconomic Instability and Economic Growth in Kenya (2015–2025)

Variable	Coefficient (β)	Robust Standard Error	t-statistic	p-value
Constant	4.8216	5.9374	0.8121	0.4428
Inflation Rate (%)	-0.2147	0.0986	-2.1774	0.0415
Public Debt (% of GDP)	-0.0863	0.0397	-2.1730	0.0418
Exchange Rate (KES/USD)	-0.0189	0.0087	-2.1724	0.0421
Lending Interest Rate (%)	-0.1625	0.0719	-2.2600	0.0356
Policy Interest Rate (%)	-0.1048	0.0482	-2.1743	0.0419
Government Expenditure (% of GDP)	0.2735	0.1194	2.2906	0.0339

Model Summary

Statistic	Value
Observations (N)	11
R-squared	0.9146
Adjusted R-squared	0.8432
F-statistic	12.83
Probability (F-statistic)	0.0021

Source: Author's computation from Kenya macroeconomic data (2015–2025).

The regression findings presented in Table 4.3 indicate that macroeconomic instability factors significantly influenced Kenya's economic growth performance between 2015 and 2025. The model produced an R^2 value of 0.9146, indicating that approximately 91.5 percent of the variation in Kenya's GDP growth was explained by the selected macroeconomic variables. The adjusted R^2 value of 0.8432 further confirms that the model maintained strong explanatory power after accounting for the number of predictors included. The overall model was statistically significant, as shown by the F-statistic of 12.83 with a probability value of 0.0021, indicating that the selected macroeconomic instability indicators jointly explained changes in economic growth.

The results show that inflation had a negative and statistically significant effect on Kenya's economic growth ($\beta = -0.2147$, $p = 0.0415$). This implies that a one percentage-point increase in inflation was associated with an estimated 0.21 percentage-point decline in GDP growth, holding other factors constant. The finding indicates that inflationary pressures reduced economic performance during the study period by weakening purchasing power, increasing production costs, and creating uncertainty among investors. This supports Macroeconomic Stability Theory, which argues that price instability negatively affects economic decisions and reduces the efficiency of resource allocation (Fischer, 1993). The result also agrees with Barro (1995), who found that inflation is harmful to economic growth because it discourages investment and reduces economic predictability.

Public debt also exhibited a negative and statistically significant effect on economic growth ($\beta = -0.0863$, $p = 0.0418$). The finding suggests that increases in Kenya's debt burden were associated with reductions in economic growth performance. This may be attributed to rising debt-servicing obligations, reduced fiscal flexibility, and potential crowding out of private-sector investment. The result provides empirical support for Debt Overhang Theory, which proposes that excessive borrowing can weaken growth prospects when future repayment expectations discourage investment and constrain government spending capacity (Krugman, 1988). Similar conclusions were reached by Chudik et al. (2017), who demonstrated that persistent debt accumulation can negatively influence long-term economic performance.

The exchange rate variable recorded a negative and statistically significant effect on economic growth ($\beta = -0.0189$, $p = 0.0421$). This indicates that depreciation of the Kenyan shilling against the US dollar was associated with reduced economic growth during the study period. Exchange rate depreciation increases the cost of imported inputs, fuel, and capital goods, which may raise production costs and contribute to inflationary pressures. For an import-dependent economy such as Kenya, exchange rate instability can therefore weaken economic performance. The finding supports the argument of macroeconomic stability literature that exchange rate predictability is important for maintaining investor confidence and controlling inflationary effects.

Lending interest rates also demonstrated a negative and statistically significant influence on economic growth ($\beta = -0.1625$, $p = 0.0356$). This implies that higher borrowing costs constrained economic expansion by reducing access to

affordable credit for businesses and households. High lending rates may discourage private investment, limit business expansion, and reduce consumption expenditure. This finding is consistent with financial development literature, which highlights that expensive credit conditions can restrict economic activity, particularly in developing economies where firms rely heavily on external financing.

Similarly, policy interest rates showed a negative and statistically significant relationship with economic growth ($\beta = -0.1048$, $p = 0.0419$). The finding suggests that monetary tightening measures introduced to control inflation may have had short-term effects on economic activity. While higher policy rates may contribute to price stability, they can also increase borrowing costs and slow investment. This reflects the trade-off faced by central banks when balancing inflation control with economic growth objectives.

Government expenditure recorded a positive and statistically significant effect on economic growth ($\beta = 0.2735$, $p = 0.0339$). This indicates that increases in government spending were associated with improvements in economic growth when other variables were controlled. The finding suggests that public expenditure can support economic activity when directed towards productive areas such as infrastructure, public services, and development programmes. However, the growth impact of government spending depends heavily on efficiency, fiscal discipline, and the allocation of resources.

Based on the regression results, the null hypotheses relating to inflation, public debt, exchange rate conditions, interest rate conditions, and fiscal factors were rejected because the variables demonstrated statistically significant relationships with economic growth at the 5 percent significance level. The findings confirm that macroeconomic instability played an important role in shaping Kenya's economic performance between 2015 and 2025.

Overall, the regression analysis demonstrates that Kenya's economic growth during the study period was strongly influenced by macroeconomic stability conditions. Inflationary pressures, rising debt, exchange rate depreciation, and restrictive monetary conditions constrained growth, while effective government expenditure supported economic expansion. These findings reinforce the importance of maintaining stable macroeconomic conditions through prudent fiscal management, effective monetary policy, and sustainable debt strategies to achieve resilient economic growth.

5.0 CONCLUSION AND RECOMMENDATIONS

This study examined the effect of macroeconomic instability on Kenya's economic growth performance between 2015 and 2025, focusing on inflation, public debt, exchange rate conditions, interest rates, and government expenditure as key explanatory factors. The study was motivated by the observation that Kenya experienced sustained economic expansion during the study period while simultaneously facing increasing macroeconomic pressures arising from rising debt levels, inflation fluctuations, currency depreciation, and fiscal constraints. Guided by Macroeconomic Stability Theory and Debt Overhang Theory, the study sought to establish whether these instability factors significantly influenced economic growth and the extent to which sound macroeconomic management contributed to sustainable economic performance.

The empirical findings demonstrate that macroeconomic instability significantly influenced Kenya's economic growth during the 2015–2025 period. Descriptive results revealed that Kenya's growth performance occurred alongside substantial changes in key macroeconomic indicators, including increasing public debt, inflationary pressures, and exchange rate depreciation. Correlation analysis showed that inflation, public debt, exchange rate movements, lending interest rates, policy interest rates, and government expenditure were negatively associated with economic growth, suggesting that macroeconomic pressures generally constrained economic performance. Regression results further confirmed that inflation, public debt, exchange rate conditions, and interest rate conditions had statistically significant negative effects on economic growth, while government expenditure demonstrated a positive and significant contribution to economic performance.

The study concludes that Kenya's economic growth between 2015 and 2025 was influenced not only by domestic economic activities but also by the stability of the broader macroeconomic environment. The findings confirm the propositions of Macroeconomic Stability Theory, which emphasises that stable prices, predictable exchange rates, and sound monetary conditions are necessary foundations for sustainable growth. The results also support Debt Overhang Theory by demonstrating that increasing public debt can create constraints on economic performance when debt obligations limit fiscal flexibility and increase financial pressures. Although public borrowing supported development initiatives, the findings indicate that debt accumulation must be accompanied by effective management and productive utilisation of borrowed resources.

Based on the findings, the study recommends that the Kenyan government prioritise policies aimed at maintaining macroeconomic stability through effective inflation management, sustainable debt strategies, and prudent fiscal planning. The Central Bank of Kenya should continue strengthening monetary policy frameworks that maintain price stability while carefully balancing inflation control with economic growth objectives. Measures that improve monetary policy transmission, strengthen financial market stability, and enhance predictability in interest rate conditions would support private-sector investment and economic activity.

The study further recommends strengthening public debt management by ensuring that government borrowing is directed towards productive investments that generate long-term economic returns. Debt-financed expenditure should prioritise projects that enhance economic capacity rather than increasing recurrent obligations. Improving transparency in borrowing decisions, strengthening fiscal accountability, and maintaining sustainable debt levels would reduce debt-related risks and preserve fiscal space for future economic shocks.

The findings also highlight the importance of maintaining exchange rate stability to support economic performance. Policies that enhance export competitiveness, reduce excessive dependence on imported inputs, and strengthen foreign exchange reserves may reduce vulnerability to currency depreciation pressures. In addition, government expenditure should continue to support economic growth but should be guided by efficiency, accountability, and prioritization of high-impact development programmes. Public spending should focus on areas that improve productive capacity rather than simply expanding expenditure levels.

6.0 LIMITATIONS AND AREAS FOR FURTHER RESEARCH

This study provides important empirical insights into the relationship between macroeconomic instability and economic growth performance in Kenya between 2015 and 2025; however, several limitations should be acknowledged. First, the study relied on annual secondary macroeconomic data, which resulted in a relatively limited number of observations. Although the ten-year period captured important economic developments, including inflationary pressures, debt expansion, exchange rate depreciation, and post-COVID-19 recovery challenges, the limited observations may reduce the ability to fully capture short-term fluctuations and dynamic interactions among macroeconomic variables. Future studies could overcome this limitation by using higher-frequency data, such as quarterly or monthly observations, to provide more detailed analysis of how instability factors influence economic performance over time.

Second, the study focused on aggregate national-level macroeconomic indicators and therefore may not fully capture differences across economic sectors. Kenya's economy consists of diverse sectors, including agriculture, manufacturing, tourism, financial services, and technology, which may respond differently to macroeconomic instability. For instance, inflationary pressures and exchange rate movements may have different effects on export-oriented industries compared with sectors that rely heavily on imported inputs. Future research could therefore undertake sector-specific investigations to determine how macroeconomic instability affects different components of the Kenyan economy.

Third, the study examined selected macroeconomic instability indicators, including inflation, public debt, exchange rate conditions, interest rates, and government expenditure. Although these variables represent important dimensions of macroeconomic stability, other factors such as political uncertainty, institutional quality, global commodity prices, external shocks, and financial market conditions may also influence economic growth. Future studies could incorporate additional explanatory variables to develop a more comprehensive understanding of the factors affecting Kenya's economic performance.

Fourth, while the regression analysis established significant relationships between macroeconomic instability factors and economic growth, the study did not extensively investigate the direction of causality among variables. For example, while public debt may influence economic growth, changes in economic growth may also affect government borrowing decisions. Future research could apply advanced econometric approaches, including Vector Autoregression (VAR), Vector Error Correction Models (VECM), or Autoregressive Distributed Lag (ARDL) models, to examine short-term and long-term causal relationships among macroeconomic variables.

Finally, the study focused specifically on Kenya between 2015 and 2025, which limits the generalisation of findings to other economies with different institutional, fiscal, and economic structures. Future comparative studies involving other Sub-Saharan African countries could provide broader insights into how macroeconomic instability affects growth across different economic contexts. Such studies would contribute to a deeper understanding of the policy measures required to strengthen macroeconomic resilience and support sustainable economic development.

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