# EXTERNAL BORROWING, POLITICAL REGIMES AND ECONOMIC GROWTH IN KENYA.

 $\mathbf{BY}$ 

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### **DECLARATION**

This research project is my original work and has not been presented for a degree award in any other institution.

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This research Project has been submitted for examination with my approval as the University supervisor.

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Finally, I acknowledge the Almighty God for granting me good health and the ability to walk through the entire journey.

### **DEDICATION**

I dedicate this research project to my dear family for their unconditional love and moral support they accorded me during the entire journey of my study

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### **ABBREVIATIONS**

ANOVA Analysis of Variance

CBK Central Bank of Kenya

ExDebt External Debt

GDP Gross Domestic Product

GDI Gross Domestic Income

g. ExDebt Growth in External Debt

g.GDP Growth in Gross Domestic Product

GNP Gross National Product

GLM General Linear Model

IMF International Monetary Fund

VIF Variance Inflation factor

### **ABSTRACT**

Public debt management is the act of scheming and executing strategies for a sound management of public debt in order to realize government funding needs, to achieve the objectives and management goals of the management that it can establish, as developing and sustaining an efficient market for government securities (Wheeler, 2004). The argument has been that public debt is used to finance economic development, that is, the basic reason for expansion of public debt was to raise funds required for economic development. External borrowing was never meant to fund current expenditure. However, this has changed and governments do borrow to meet the current expenditure. The study sought to establish the relationship between external borrowing and the economic growth; and to determine the effects of regime changes on external borrowing and economic growth in Kenya. The study was anchored on two theories; the Keynesian theory and the classical theory. The study used descriptive research method. We used secondary data which was collected from Central Bank of Kenya, published on their website.

Data was collected for the three r political regimes which was in power from 1992 to 2021. ANOVA and regression techniques were used to analyses the data. The results showed that regime 2 had the highest growth in GDP at 5% while regime 1 had the lowest growth in GDP at 2.2%. Regime 3 on the other hand had the highest growth in external debt of about 22.6%. The P-value of estimated coefficient of external debt is zero, meaning that external debt does not impact economic growth. In all the three regimes, there appear to be no relationship between external debt and economic growth. If debt is not put into proper use, then it will have no influence on economic growth. External debt and political regime are not linked to economic growth, that is, there is no interaction between regime and external debt as determinants of economic growth. The study recommends that the Government of Kenya should put external debts into projects that will lead to growth of economy. External debts should not be used to fund recurrent expenditures.

### **CHAPTER ONE: INTRODUCTION**

### 1.1 Background of the study

Democracies change leadership to improve the health of the economy. Citizens are expected to change leadership when the performance in the economy is poor. Change in leadership is associated with revolution in political regime and economic policies. At government level such changes focus on both fiscal and monetary policy. The argument is that using fiscal and monetary policy the government can control economic growth. Government raises the amount it needs to support it expenditure through taxation and borrowing. Borrowing create public debt that attract financial obligations in the form of interest and repayment of the principal. Therefore, a particular political regime can use less or more debt. That borrowing if properly deployed must translate into economic growth, Does it? The point is that governments take actions in the economy that regulate unemployment, business cycles and inflation. (John B. Taylor, Harald Uhlig, 2016). Public debt management is the act of scheming and executing strategies for a sound management of public debt in order to realize government funding needs, to achieve the objectives and management goals of the management that it can establish, as developing and sustaining an efficient market for government securities (Wheeler, 2004). The argument has been that public debt is used to finance economic development, that is, the basic reason for expansion of public debt was to raise funds required for economic development. External borrowing was never meant to fund current expenditure. However, this has changed and governments do borrow to meet the current expenditure. Theoretically, and this is the mainstream argument in finance is that debt in itself does not add value, but the projects financed by debt can add value (Modigliani and Miller, 1966).

The classical theory and the Keynesian theory will be guiding this study. The Classical theory is characterized by flexible rewards. Rewards increase with inflation and reduces with deflation. According to classical economists, overall demand is consumers spending, investment spending and net exports, while aggregate supply is fixed. Changes in aggregate demand cause fluctuations in overall price levels. The Keynesian theory concurs with the classical theory but not fully, because sometimes prices and remunerations are not fixed, and fluctuations in total demand will cause price levels to changes hence allowing self-adjustments in the economy, as stated in the classical

theory. In case there is no self-adjustment in the economy, and the only way to correct that is through Government intervention.

In Kenya, there has been an increasing trend of external debt since multiparty, the year 1992. This trend has been worrying whether it translates into economic growth or not. A research done by (W.Dickson, 2021) revealed that as at September 2020, Kenya external debt was 51.4% of it total debt. This is above recommended value by IMF which is 40%. His research also revealed that public debt rose from 48.6% in the year 2015 to 69% in the year 2020 of the GDP. This is a worrying trend especially for a developing country.

### 1.1.1. External Debt

External debt is part of a country's obligation that is borrowed from financial institutions outside the borrowing countries. (D. Kindness 2021). External debt is dominated in foreign currencies. The nature of external debt is that the borrower worries about both the fluctuations in exchange rates and normal debt obligations, namely interest due and repayment of the principal. This explains why countries that borrow externally must improve on their exports to earn sufficient foreign currency to meet external debt obligations. An alternative to external debt is direct foreign investments intended to boost economic growth. However foreign investors are particular about country risk which significantly depend on the level of external borrowing. Public debt is the total amount borrowed (internal and external) by the government to meet its funding requirements, specifically development expenditure. It was never intended to finance recurrent expenditure as is the case now days, it was meant to finance projects that support long term productivity. In terms of categories of debt, public debt can be split into internal debt and external debt. This explains why external debt was referred to as development finance while internal debt was referred to as recurrent finance. Internal debt are loans floated by a government within a country, and examples include market loans, bonds and treasury bills. (W. Dickson, 2021)

External debt is not necessarily bad for an economy. Its inflows can sometimes improve the economy and promote economic growth, only if it is utilized prudently. However, since the settlements on outside debts are done in foreign money, it exhausts a country's overseas exchange funds. The worst part of excessive use of external debt is devaluation of local currency. In addition, default on external debt affects the private sector by interfering with foreign investments and trade. If a nation defaults in repaying its external debt, it is considered to be in sovereign default and will be blacklisted in debt markets (World Bank Group (July 14, 2017). The result would be debt overhang, a country reaches a level where it cannot borrow from any lender and therefore unable to take further investments.

### 1.1.2. Political Regimes

A political regime is the form of government that regulates the operations of a government or institution and its interfaces with the governed. It is the form of government values that regulates the operations of a government. Different governments are associated with different political regimes. (P. James, 2007)

Political business cycle theory assumes that the economy shifts when power is transferred from one leader to another and that major policy changes such as the use external debt is connected to the political party in power (Blomberg, Brock, and Hess. 2003).

Kalecki(1943) proposed that governments trigger the economy prior to be popular, but capitalists reverse the same thus creating a business cycle. The desire to keep power forces leaders to keep on borrowing; while capitalists are not comfortable government spending to create full employment.

Due to political differences in management of inflation and unemployment, leftist governments can stimulate the economy but conservatives can contract the economy. (Alesina, 1987). In USA Drazen (2000) observed that "Democratic governments have lower rate of inflation than Republican governments in the early times of their terms, contrary to the rational partisan theory of inflation." Excess use of debt by a particular political regime can be inflationary thus dampening the economy that translates into political riots.

The political regimes are the independent variables while the economy is the dependent variable. In this case therefore we can measure economic status by understanding the political regimes, because the economy depends on what is happening in the government. In such a scenario, therefore, no variable is controlled.

According to (C. Potter, 2021), an additional value of goods and services when measured over a period of time is what is referred to as economic growth. Ordinarily, the aggregate growth is measured in terms of gross national product (GNP) or gross domestic product (GDP) and sometimes other similar standard of units are used.

### 1.1.3. Economic Growth

Economic growth is the rise in the market value of the output of a country for a period of time. It is the percentage rate of increase in the real gross domestic product (GDP). GDP is the total production of the economy. The other indicator of total output is Gross Domestic Income (GDI), which includes labor rewards, business profits, and other sources of income. (C. Potters, 2021)

Economic growth is driven by four factors namely land, labor, capital, and entrepreneurship. Debt enters economic growth through capital. Governments borrow to finance economic projects. The intention of the countries that borrow externally is to finance economic growth. The assumption is that more use of debt by a particular county moves economic growth to the next level. Adam Smith (1970) and David Ricardo (1951) argued that public debt weakens economic growth.

Excessive debt exposes a country to a fiscal deficit and to meet debt obligation taxes are likely to be increased (Checherita and Rother, 2010). In the case of external debt there will be a need to raise large amounts of foreign exchange to meet debt obligation. Furthermore, default on external debt affects trade, foreign direct investment and foreign and domestic credit to the private sector (Tanna, 2018). Countries that default will be excluded from international capital markets, thus finding it difficult in taking advantage of low interest rate in such markets. These happenings might ruin overall economic performance.

### 1.2 Research Problem

Aybarc (2019) argues that 'external borrowing has an increasing effect on national income when taken and has a decreasing effect on national income when paid'. The theoretical argument would be the existence between public borrowing and economic development is not linear. This theoretical relationship suggests that at low stages of borrowing, debt promote financial development and that at high levels debt, could significantly slow financial development (Cecchetti, Mohanty and Zampolli, 2011). This would suggest that low levels of external debt could promote economic growth, but increase of debt to higher economy could slow down economic growth. The dispute is whether external debt accelerates or retards economies, that is whether external debt is productive or not. Snider 1990 debates that the burden of borrowing service is independent on how governments used the borrowed funds, it is assumed to be the major obstacle to many Third World countries achieving certain economic growth. It is important looking at data across different political regimes to establish the actual role of debt. The proposition is that if external debt is channeled into infrastructure and other worthwhile capital investment, there will be a multiplier effect that translates into economic growth and vice versa if the proceeds external debt ends up in either corrupt hands.

At country level the amount of external debt deployed is a political decision and likely to support policies of a political regime (Snider, 1990). Snider (1990) suggests that low political capacity is associated with poor economic performance and this suggests that use of external debt by different political regimes might explain variations in economic performance. In Kenya, different political regime might conceptualize use of debt differently. Ideally, to realize economic growth, debt whether external or internally should be applied to capital expenditure and not current expenditure. Whether this is adhered to depends on the political regime in place. Kenya has witnessed changes in political regimes and it is important assessing the use of debt and economic performance across the regimes. However, the standard of living in Kenya is relatively low. Money borrowed externally can be employed in productive projects and other infrastructures which can help in the productivity of other sectors (Ajisafe and Gidado, 2006). By so doing, external debt repayments will not affect economic growth. But, if

Kenya fails to repay its debt, it will lose its' credit worthiness, hence affecting the economic performance by reducing the accessibility of foreign debt. The major challenge to the government is ensuring efficiency in delivery of services and increased productivity of government investments. Therefore, it important examining the political, social and economic effects of both internal and external debt. Furthermore, heavy external borrowing, if not correctly invested, will be a burden to next generation.

A research done by (P. Kofi, 2016) analyzed the association between public borrowing, financial development and democracy. Current expenditure is unlikely to translate into economic growth. Debt management has drawn a lot of concern across the world. (IMF, 2014). There is fear that the debt is ever increasing and in the near future, it will be difficult meeting debt obligations and the possibility of defaulting increases.

Several researchers in Kenya have come up with different conclusions on the relationship between external debt and economic growth. (M. Were,2001) conducted a study and concluded that external debt has negative effect on economic growth. (B. Onyango, 2014) did a study on effect of foreign debt on economic growth and concluded that the two change in the same direction. (G. Mukui, 2012) also conducted a study and concluded that external debt affects economic growth in the opposite direction. He mentioned other factors like inflation, labor and wages.

In the studies mentioned and others, no one ever thought of the role that politics play in the relationships they studied. This forms my research gap of the study.

### 1.3 Objectives of the Study

This study had two objectives.

- i.To establish the relationship between external borrowing and the economic growth in Kenya.
- ii.To determine the effect of regime changes on external borrowing and economic growth in Kenya.

### 1.4 Value of the Study

Many studies on the association between outside obligation and financial development have been carried out with varied results. Some studies agree others don't. The findings of this study shall be available in libraries and future researchers may use them for further studies.

In order to translate into economic growth, external borrowings were meant for funding development projects. However, in practice, the government is using external borrowings to fund recurrent expenditures. This was not the initial intention of external debts.

This think about is pivotal for partners within the political administrations in Kenya given that they will understand the impact of political administrations on outside borrowing and financial development. It will also offer assistance the Kenyan Government to create arrangements that will guarantee it is secured towards making strides financial development through the amassing of capital, household venture and development in efficiency.

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

### 2.1 Introduction

This chapter will discuss the basics of the theories guiding the study, different options, empirical studies and research gaps. This chapter will look into the relevant literature done by researchers over the past years and shed some more light on the topic under study.

### 2.2 Theoretical Review

This section will assess some of the theories supporting our study. The aim of this section is to evaluate a body of knowledge that has anchored the theme of this research.

### 2.2.1 The Classical View

This is an economic theory about what impact public debt does on economic growth. Smith et al, argued that resources in the public sector are wasted often as compared to the private sector where resources are utilized. A country has a role of ensuring smooth economic development and growth even with the unfavorable state of public borrowing. Smith explained that having a public debt makes a country delay in its progress of economic development. Acquiring more loans is dangerous and harmful because it reduces the productivity in terms of labor and entrepreneurship.

This theory also agrees that public indebtedness can have some positive effects on the economy. In some situations, the accumulation of the loans borrowed public can increase productivity in a country and hence leading to economic growth.

### 2.2.2 The Keynesian View

This theory was developed by Keynesian; He believes in the classical theory but only to a certain limit. Therefore, it can be correct to say that the Keynesian view is an addition of the classical view. Keynesian view argues that people make decisions which satisfy their self-interests and drive changes in the free market economy. This is done by putting prices equal to the output. This view believes that there are times when the economy fluctuates, and the market forces break down completely. Without Government interventions and outside influence, the adverse economic conditions will

persist. The government therefore, has a role to play in correcting the economy to ensure welfare of its citizens and consumers. Keynesian concludes that financial matters in a few circumstances, there is no solid automatic mechanism move that yields full business levels (Mankiw, 1992). Within the 'neoclassical synthesis', which combines Keynesian large-scale concepts with a small-scale establishment, the conditions of common balance permit for cost alteration to eventually accomplish the objective (Mankiw, 1992).

### 2.3 Empirical Studies

P. Kofi, (2016) analyzed the association between public borrowing, financial development and democracy. Current expenditure is unlikely to translate into economic growth. Debt management has drawn a lot of concern across the world. (IMF, 2014). There is fear that the debt is ever increasing and in the near future, it will be difficult meeting debt obligations and the possibility of defaulting increases.

A research carried out by Kittony, (2014) about the kind, magnitude and developments in public internal borrowings and their impacts on economic development in Kenya, revealed that internal borrowings, borrowing rates and public investments have an impact on GDP

Modigliani (1961), argues that an open obligation may be a liability to future generation since it diminishes the stock of private capital, as a result decreases the stream of pay. Particularly, open obligation can contrarily affect financial development by swarming out private ventures. In the event that the extent of government activities supported through obligation are considerably inflated, borrowing rates may significantly rise after some period of time. An increment in obligation will not bear any cost to forthcoming eras in spite of profiting the present era. Modigliani (1961) contends that the net cost of open obligation can be counterbalanced in portion or in add up to in the event that borrowed stores are utilized to back beneficial open capital arrangement, which in turn makes strides the genuine wage of future eras. The intrigued collecting from both household and outside obligation is frequently charged. This decreases the accessible utilization of citizens and their investment funds. This results in capital stock and financial development diminish.

Obligation overhang alludes to when the capacity of a nation to reimburse its outside obligation diminishes below the legally binding esteem of obligation., on the other hand, the link between open obligation and financial development is not straight. (Cohen,1993) This implies that an increment in outside open obligation advances speculation to some level or 21 limits.

Past this limit, open obligation will cause financial specialists lose confidence from giving capital to the government. In the long run, financial development starts to decay as intrigued rates increment. Tall open obligation can influence financial development contrarily through distinctive networks. One of the foremost imperative networks is the long-standing borrowing charges. Tall long-standing borrowing charges can swarm out non-public venture, subsequently lessening future yield development. Expanded open financing needs are likely to extend paramount obligation yields. In this way, we anticipate a stream of capital or reserves from individuals to the open division. These will increase interest rates and reduces private investments. According to Krugman (1988), outside obligation influences financial development through its antagonistic impacts on speculations. The level of speculation reduces when residential and remote financial specialists reduce the supply of capital, as a result lowering financial development. Open obligation can too adversely influence financial development.

Drawing on the politically influenced economy of tax assessment writing, this think about will create speculations around the relationship between political administrations, financial development and the government's motivation to borrow.

These Researchers in this field can be classified into two wide areas, each of which creates a particular hypothetical rationale to progress unmistakable reply to the most address. One of these areas is the "Tocquevillian" argues that people will hold their inventors accountable where charges in political framework is higher. Most government systems adhere to such frameworks. Another area is the "predatory state" point of view with a different opinion that charge rates will be higher in frameworks where the inventors cannot be held responsible by their people. These frameworks can be way better argued to as dictatorial and centralized type of government. We see at point in turn and after that apply each rationale to remote obligation amassing. The

Tocquevillian point of view states that charge rates will increase in popular governments than in absolutisms. It expects that the government employments charges to redistribute pay from the affluent to the destitute, and rules out by suspicion the plausibility that salary is.

A voter will lose from government systems that distribute salary in a situation where pivotal voters' salary is higher than society's normal salary.

Political administrations with powers to decide the direction of voters will always decide the voting pattern in the society. In a well-known government with all structures which allow its citizens to vote, the significant voter's salary will drop underneath society's normal wage. In vote-based systems, in this manner, the significant voter is likely to be paid below a framework of all asses and exchange rates. As a result, in vote-based systems, the crucial elector is likely to choose a tall charge and exchange framework.

As examined, these two viewpoints give competing theories around how components of political responsibility shape the motivation construct up">to construct up outside obligation. Agreeing to the Tocquevillian point of view, nations in which the people hold governments responsible will have bigger remote obligation burdens than countries in which they don't. In case government arrangement endeavors to diminish salary disparity, we can anticipate governments responsible to huge voters who are willing to utilize outside obligation. Subsequently, the Tocquevillian viewpoint proposes that far-off obligation are always lower in countries where leaders are held accountable than in countries where they are not.

It is clear that vote based system is categorically related to financial growth putting in consideration all other relevant information around the world put together. Of course, this does not suggest that vote based system involves a positive impact on development. For that reason, there may be factors that influence both administration and development efficiently, such as particular history designs, other political factors or topographical variables (Acemoglu et al. 2008)

Additionally, the relationship may be due to financial development affecting the forecasts for democratization and majority rule solidness (Przeworski and Limongi 1997).

Adom, Philip Kofi (2016), inquired about on the relationship between open obligation, financial development and majority rule government. In this consideration, we analyze the relationship between open obligation, financial development and all political administrations. The point of view, nations in which the people hold governments responsible will have bigger remote obligation burdens than countries in which they don't. The savage viewpoint anticipates obligation in political framework to be higher where government is put to task by a huge division of citizens and lower in frameworks where such responsibilities are observed.

Abbas and Christensen (2007) outline the effects of residential obligation on financial development for some low-income nations between 1975 and 2004 (inclusive) using Granger Causality Regression demonstrate. The investigation appears that direct levels of attractive residential obligation relative to GDP have direct non-linear impacts on financial development, but debt levels above thirty-five percent of add up to bank stores negative influence on financial development.

Kemal (2001) clarifies the commitment storing up and its recommendations for advancement and dejection in Pakistan. The consider shows up that commitment storing up (private and exterior) and commitment adjusting influences the down and out unfavorably. The disclosures of the consider layout that undoubtedly in show disdain toward of the reality that commitment cost as a rate of GDP of Pakistan outperforms South Asian countries but not so tall as to go for commitment sort in off. This suggests that Pakistan has the capacity to advantage the obligation.

Adofu and Abula (2010) examined the association among residential and financial development in Nigeria for the period between 1986 and 2005. Their discoveries appeared that residential obligation has influenced the increase in GDP of the Nigerian economy contrarily and suggested that it be disheartened. They proposed that the Nigerian GDP ought to instep focus on extending the assess income base.

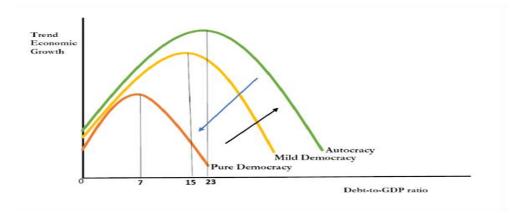


Figure 2.1: The relationship between economic growth, political regimes and debt.

Figure 2.1 shows that Debt-to-GDP ratio is increasing from Pure Democracy to Autocracy. It means when there is no democracy, the government tends to borrow more since there is no oversight. When there is strong oversight, borrowing is under checks.

It is also evident that economy tends to grow as Debt-to-GDP increases. However, the growth reaches an optimum level after which any additional debt retards the growth.

### 2.4 Conceptual Framework

External debt is our independent variable which influences economic growth as our dependent variable.

Between external debt and economic growth, there is a moderating variable which is political regime. See figure 2.2

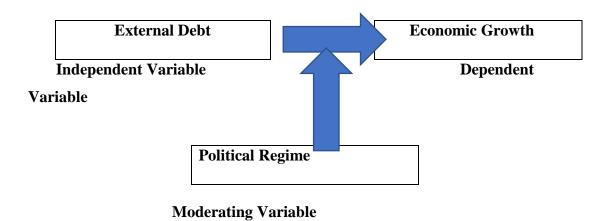


Figure 2.2: Conceptual Framework

### **CHAPTER 3: RESEARCH METHODOLOGY**

### 3.1 Introduction

This chapter discusses the design of the research, data collection methods used and data analysis. It follows the approach of a case study because we are only talking about Kenya. So the population and sample are not be included.

### 3.2 Research Design

The study adopts a descriptive research design. Mugenda and Mugenda (2003) describe descriptive research design as a precise, observational asking into which the analyst does not have a coordinate control of autonomous variable as their sign has as of now happened or since the intrinsically cannot be controlled. This inquire about plan is more fitting since the think about looks for to construct an layout almost the relationship between the factors of this consider, which are; household obligation and financial development

### 3.3 Data Collection

The study used secondary data. The data on internal borrowing were gathered from the published information from Central Bank of Kenya. Information on economic growth were gathered from the Kenya National Bureau of Statistics whereas data on public borrowing was gathered from the IMF statistics. Finally, information on political regimes will be collected from publications on political regimes from Political Party Registration .

The study compared three political regimes in Kenya. The three regimes shall include, the late president Moi regime for a period of ten years (1992-2001), retired president Kibakis regime for a period of ten years (2002-2012) and the current president Kenyatta regime for a period of eight years (2013-2020).

### 3.4 Data Analysis

Data analysis may be described as the process of classifying, arranging, manipulation and summarization of information to answer the research questions.

The whole process begins immediately after data collection and ends at explanation and dispensation of the data (Cooper and Schindler, 2008). Upon receipt of the filled-in questionnaires, they are coded, examined and edited according to each variable of the study. Editing of the raw data facilitates detection and correction of errors. This guarantees consistency, uniformity, completeness and accuracy while at the same ensuring maximum data quality standards. Through coding, the raw data will be transformed into numerical symbols that will be tabulated and counted.

The first step of analysis was to compare the means and variances of economic growth and external debt across the three different regimes. Regime 1 covered a period from 1992 to 2001, regime 2 covered from 2002 to 2012 and last regime 3 covered from 2013 to 2021.

We used analysis of variance (ANOVA) to analyze the data. The One-Way ANOVA procedure produces a one-way analysis of variance for a quantitative dependent variable (economic growth or external debt) by a single factor (independent, political regime) variable. This is to test the hypothesis that several means (economic growth and external debt over the three political regimes) are equal. In addition, this statistical method tells us which mean differ.

The next step would be to determine if there is an interaction effect of independent variables (external debt and political regime) on economic development. At this stage the two-way ANOVA will be relied on. The interaction term in a two-way ANOVA establishes whether the effect of one of the independent variables (external debt) on the dependent variable (economic growth) is the same for all values of your other independent variable (political regime) (and vice versa)

We also did the analysis using a regression, the relationship between debt and GDP is established at absolute level and growth level (as per objective one).

## CHAPTER FOUR: DATA ANALYSIS, RESULTS AND DISCUSSION

### 4.1 Introduction

This chapter presents, data analysis, results and the findings of what the data tell us about the two objectives of the study namely; to establish the relationship between external borrowing and economic growth, and to determine the effect of regime changes on external growth and economic growth in Kenya.

### **4.2 Data**

Data was extracted from secondary sources on external debt and economic growth for the three regimes from the year 1992 to 2020. The results are as shown in appendix 1. In percentage terms the highest increase in external debt was immediately after the 1992 elections, an increase of 94 percent, showing the confidence in that regime and the highest decrease was also during that time. In absolute terms the highest debt was during regime three while the lowest was during regime one.

### 4.3 Descriptive Statistics

Descriptive statistics was used to summarize the data on external borrowing and economic development. The summary of the results is shown in table 4.1 and 4.2 The elections after 2010 are in August of every year and the analysis assume a lag in economic growth. This explains why regime three has seven observations.

Table 4.1: Descriptive Statistics: External Debt (ExDebt) and Growth in Domestic Product (gGDP) By regime

Variable	Regime	N	N*	Mean	StDev	CoefVar	Minimum	Maximum
ExDebt	1	10	0	412749	54161	13.12	319388	484721
	2	11	0	564448	180612	32.00	406923	922369
	3	7	0	2379350	906084	38.08	1170696	3793285
gGDP	1	10	0	0.02254	0.01641	72.81	0.00350	0.04410
	2	11	0	0.05069	0.02238	44.15	0.00230	0.08410
	3	7	0	0.04736	0.02275	48.03	-0.00310	0.063

The highest growth in GDP was during regime 2, with average of 5 percent and the lowest was during regime 1, see Table 4.1. The highest average growth in external debt is during regime three (3) at an extremely high rate of 22.6 percent, see table 4.2.

Table 4.2: Descriptive Statistics: Growth in External Debt (gExDebt) By regime

Variable	Regime	N	Ν*	Mean	StDev	CoefVar	Minimum	Maximum
gExDebt	1	10	0	0.082	0.347	424.92	-0.341	0.940
	2	10	0	0.0908	0.0996	109.70	-0.0713	0.2697
	3	7	0	0.2261	0.0817	36.15	0.1406	0.3797

### 4.4 External Debt and GDP

The researcher sought to establish the association between external debt and economic growth in GDP using regression. The relationship between debt and GDP is established at absolute level and growth level (as per objective one). The results of the analysis are shown table 4.3 are regression results when absolute value of external debt is used to predict economic growth. The P-Value for the regression in the analysis of variance table is 0.738, meaning that the model is significant at  $\alpha$  level of 0.05. This indicates that the external debt co-efficient across all regimes is not different from zero and therefore have no information.

Table 4.3: Regression Analysis: gGDP versus ExDebt

Analysis of Variance

Source	DF	Adj SS	Adj MS	F-Value	P-Value
Regression	1	0.000067	0.000067	0.11	0.738
ExDebt	1	0.000067	0.000067	0.11	0.738
Error	26	0.015154	0.000583		
Total	27	0.015221			

### Model Summary

### Coefficients

Term	Coef	SE Coef	T-Value	P-Value	VIF
Constant	0.03820	0.00658	5.81	0.000	
ExDebt	0.000000	0.000000	0.34	0.738	1.00

Regression Equation

$$gGDP = 0.03820 + 0.000000 ExDebt$$

The coefficient in the regression above show that external debt does not impact economic growth. The P-Value of estimated co-efficient of external debt is zero see table 4. In table 3 and 4 the regression r-squares are too low, the r-square is 0.00 percent.

Table 4.4: Regression Analysis: gGDP versus ExDebt, Regime

Method

Categorical predictor coding (1, 0)
Analysis of Variance

Source	DF	Adj SS	Adj MS	F-Value	P-Value
Regression	3	0.005958	0.001986	5.15	0.007
ExDebt	1	0.001275	0.001275	3.30	0.082
Regime	2	0.005891	0.002946	7.63	0.003
Error	24	0.009263	0.000386		
Total	27	0.015221			

### Model Summary

### Coefficients

Term	Coef	SE Coef	T-Value	P-Value	VIF
Constant	0.02895	0.00714	4.05	0.000	
ExDebt	-0.000000	0.000000	-1.82	0.082	4.56
Regime					
2	0.03051	0.00868	3.51	0.002	1.30
3	0.0554	0.0194	2.85	0.009	5.12

### Regression Equation

### Regime

3

```
1 gGDP = 0.02895 - 0.000000 ExDebt
2 gGDP = 0.05946 - 0.000000 ExDebt
```

qGDP = 0.0843 - 0.000000 ExDebt

Further analysis was done by categorizing all the three political regimes, there appear to be no relationship between external debt and economic growth. If debt is not put to

### Table 4.5: Regression Analysis: gGDP versus gExDebt

proper use, then it will have no influence on economic growth.

Analysis of Variance

```
Source
             DF
                   Adj SS
                              Adj MS
                                      F-Value
                                                P-Value
                 0.000499
                           0.000499
                                          0.88
                                                  0.356
Regression
             1
                 0.000499
                           0.000499
                                          0.88
                                                  0.356
  gExDebt
             1
Error
             26
                 0.014722
                           0.000566
Total
             27
                 0.015221
```

```
T-Value P-Value VIF

Constant 0.04216 0.00515 8.19 0.000

gExDebt -0.0194 0.0207 -0.94 0.356 1.00
```

Regression Equation

gGDP = 0.04216 - 0.0194 gExDebt

In table 4.5, growth in external debt is used as a predictor variable and the results do not differ much from the previous analysis that is external debt does not explain variation in economic growth. This would imply that debt is not used to propel economic growth.

The time series data plotted in Graph 1 shows a stable GDP growth and an erratic and consistently rising external debt.

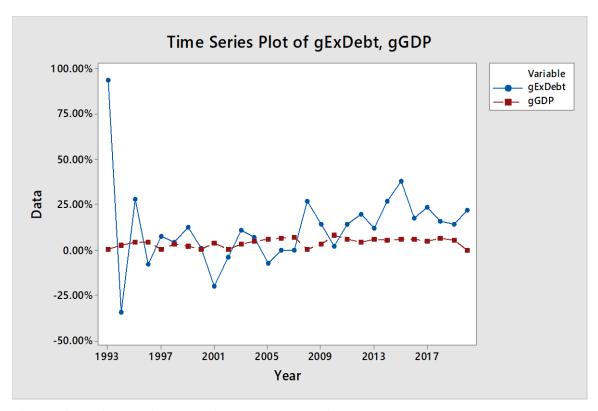


Figure 4.1: Time series plot of gExDebt and gGDP

### 4.5 Economic Growth, External Debt and Political Regime.

In order to answer the analysis on the second objective of the study on determining the effect of political regime on the relationship between economic growth and external debt, two tests were done. First, using a component of ANOVA, namely General Linear Model (GLM) to establish whether the mean of both economic growth and external debt growth deter across the three political regimes.

GLM fit least square models using categorical factors (political regimes) and covariates (external debt and economic growth). The idea is to test the effect of external debt and political regime on economic growth. There are three political regimes, regime 1, regime 2 and regime 3. The regime is fixed because the interest is to examine the effect on economic growth at those levels. The results are presented in table 5. The coding scheme used to fit general linear model is (-1, 0, +1) to compare economic growth and external growth across the three regimes. With this code each co-efficient in the regression represent the difference between each level mean and the reference mean, in

this case regime 3. Regime is fixed and is at 3 levels. The results are presented in Table 4. 6 and Table 4. 7 respectively.

Table 4.6. General Linear Model: gGDP versus gExDebt, Regime

```
Method Factor coding (-1, 0, +1)
Factor Information
Factor Type Levels Values
Regime Fixed 3 1, 2, 3
```

### Analysis of Variance

Source	DF	Adj SS	Adj MS	F-Value	P-Value
gExDebt	1	0.000705	0.000705	2.13	0.161
Regime	2	0.006323	0.003161	9.55	0.001
gExDebt*gExDebt	1	0.000193	0.000193	0.58	0.455
gExDebt*Regime	2	0.000662	0.000331	1.00	0.386
gExDebt*gExDebt*Regime	2	0.001202	0.000601	1.82	0.190
Error	19	9 0.006290	0.000331	L	
Total	2	7 0.015221	1		

### Model Summary

Table 4.6 shows the analysis of variance, where the only variable with a p-value that is less than 0.05 is political regime (0.001). The insignificant interaction effect of political regime with both linear and quadratic external debt growth terms implies that the coefficient of second order regression model of the effect of external debt on external economic growth does partly depend on the political regime. The r-square value shows that the model 58.68 percent is explained by the model. Factors outside external debt might explain economic growth.

**Table 4.7 Estimated Coefficients for External Debt** 

### Coefficients

Term	Coef	SE Coef	T-Value	P-Value	VIF
Constant	0.0801	0.0251	3.19	0.005	
gExDebt	-0.307	0.211	-1.46	0.161	177.42
Regime					
1	-0.0555	0.0253	-2.19	0.041	32.37
2	-0.0145	0.0255	-0.57	0.575	34.12
gExDebt*gExDebt	0.331	0.434	0.76	0.455	418.47
gExDebt*Regime					
1	0.298	0.211	1.41	0.174	205.98
2	0.274	0.221	1.24	0.231	85.30
gExDebt*gExDebt*Regime					
1	-0.342	0.434	-0.79	0.440	464.99
2	-1.017	0.534	-1.91	0.072	34.59

### Regression Equation

### Regime

```
1 gGDP = 0.02458 - 0.0091 gExDebt - 0.0113 gExDebt*gExDebt
```

### Fits and Diagnostics for Unusual Observations

		Std Resid	Resid	Fit	gGDP	Obs
Χ		-1.20	-0.0025	0.0060	0.0035	1
Χ		-1.18	-0.0027	0.0599	0.0572	23
	R	-2.66	-0.0414	0.0383	-0.0031	28

- R Large residual
- X Unusual X

The table 4.7 shows the estimated co-efficient for the co-variable (external debt). External debt and the interaction of external debt and political regime are presented. The standard errors, t-statistics and p-values for all the predictor variables are statistically insignificant. Therefore, the data tell us that external debt and political regime are not linked to economic growth.

The variance inflation factor (VIF), a measure of multi-covinearity is high. VIF values greater than 5-10 suggest that the regression co-efficient are poorly estimated due to heavy multi-collinearity. The three regression equation for each regime run parallel suggesting no interaction effect between regime and external debt as determinants of economic growth.

### 4.6 Discussion of the Findings

The study revealed that in all the three regimes, there appear to be no relationship between external debt and economic growth. This would imply that debt is not used to propel economic growth. This is contrary to classical theory which concluded that the accumulation of the loans borrowed public can increase productivity in a country and hence leading to economic growth. The study concurs with Keynesian theory that external debt alone cannot impact on economic growth unless the government plays its administration rule properly.

The study further concurs with previous studies such as Kofi, (2016) who analyzed the association between public debt, economic growth and democracy and concluded that current expenditure is unlikely to translate into economic growth. The study, however, contradicts the studies carried out by Were (2001) who conducted a study and concluded that external debt has negative effect on economic growth.; Onyango,(2014) did a study on effect of foreign debt on economic growth and concluded that the two change in the same direction; and Mukui (2012) who conducted a study and concluded that external debt affects economic growth in the opposite direction.

It was also discovered that external debt and political regimes are not linked to economic growth. There was no interaction between regimes and external debt as determinants of economic growth.

CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter presents a summary of the research Findings, Conclusion and

Recommendations of the study.

**5.2 Summary** 

In summary, regime 2 had the highest growth in GDP of about 5% while regime 1 had

the lowest growth of GDP of about 2.2%. Regime 3 had the highest growth in external

debt of about 22.6% while regime 1 was the lowest at 8.2%. The variations in regime 1

were extremely high at the rate of 34.7%, the other regimes 2 and 3 observed very small

variations of 9.96% and 8.17% respectively.

The P value of estimated coefficient of external debt is zero, meaning that in all the

three regimes, external debt does not impact on economic growth. If debt is not put into

proper use, then it will have no influence on economic growth.

Finally, external debt and political regime are not linked to economic growth, that is,

there is no interaction between regime and external debt as determinants of economic

growth.

5.3 Conclusion

The study concludes that there is no statistically substantial association between

external debt and economic growth. The estimated coefficient between external debt

and economic growth is zero, meaning the association between the two does not exist.

There were absolute variations in external debts with the first regime having the lowest

while the third regime having the highest debt. However, the observation across all the

regimes gave similar results, that is, no association between the two exist. This is an

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indication that political regime does not have any influence on external debt and economic growth.

Finally, we may conclude that the application of external debts is what may influence growth in economy, that is, how external debt is used by the government. If external debt is used to fund projects, then it is likely to trigger economic growth than when it is used in recurrent expenditures.

### **5.4 Recommendations**

External debts only translate into economic growth only if put into proper use. Accumulation of debt in itself does not stimulate economic development.

External debts were initially intended to fund development projects. This initial intention was to make external debt a source of economic development. However, the current practice has seen government using borrowed funds to discharge recurrent expenses

This study recommends that the Government of Kenya should put external debt into projects which will lead to the growth of economy. The Government should avoid using external debts to fund recurrent expenditures, otherwise, Kenyans will be left with a burden of debt repayment without improving standards of living.

### 5.5 Limitation of the Study

Secondary data was collected from information published by the Central Bank of Kenya. The accuracy and validity of this data can only be confirmed by the CBK. The external debt for the third regime had been posted up to the year December 2020, making observations of eight years while the other two regimes were ten years each.

Some of the data collected were too old such as data for the year 1992 and compared with the most recent data of the year 2020.

### **5.6 Further Studies**

The study sought to establish relationship between external debt and economic growth in Kenya; and the impact of political regimes on external debt and economic growth. Similar studies should be carried out in future to investigate areas where external debts

can be used in order to impact economic growth. More studies should be done to find the level at which external debts can be maintained against total public debt to avoid overburden future generations with debt repayments.

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APPENDECIES

1. External Debt & Economic Growth as at 31 December

Political		<b>External Debt</b>	GDP Growth
Regime	Year	(KShs. Million)	0/0
	1992	249,852.65	-0.80%
	1993	484,721.13	0.35%
	1994	319,387.74	2.63%
	1995	408,876.56	4.41%
	1996	377,480.18	4.15%
First	1997	405,227.47	0.47%
	1998	422,421.95	3.29%
	1999	475,861.29	2.31%
	2000	479,477.71	0.60%
	2001	384,302.58	3.78%
	2002	369,729.83	0.55%
	2003	410,149.00	2.93%
	2004	439,992.95	5.10%
	2005	408,601.92	5.91%
	2006	407,742.55	6.47%
Second	2007	406,923.00	6.85%
	2008	516,671.33	0.23%
	2009	588,970.31	3.31%
	2010	599,930.46	8.41%
	2011	685,607.92	6.11%
	2012	821,972.82	4.56%
	2013	922,369.15	5.88%
	2014	1,170,696.28	5.36%
	2015	1,615,184.20	5.72%
Third	2016	1,896,443.05	5.88%
	2017	2,349,284.44	4.81%
	2018	2,723,734.27	6.32%

2019	3,106,822.96	5.37%
2020	3,793,285.24	-0.31%