# A Dynamic Panel Data Analysis of Democracy, Political Institutions and Economic Growth in Africa (1996-2016)

By

### JONASI, Collen

#### **THESIS**

Submitted to

KDI School of Public Policy and Management

In Partial Fulfillment of the Requirements

For the Degree of

MASTER OF DEVELOPMENT POLICY

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Committee in charge:

Professor Lee, Changkeun, Supervisor

Professor Park, Jin

Professor Park, Sungho

Approval as of December, 2022

**DECLARATION** 

I, Collen Jonasi, do hereby declare that this thesis is a product of my effort, I did not get any

assistance from other people, except advice from my supervisors Professor LEE, Changkeun,

and Professor PARK, Jin. This piece of work has never been submitted to any other institute,

either wholly or in part, for the award of any academic qualification. All the material used in

this research has been duly acknowledged.

Student's name: JONASI, Collen

Signature:

i

# **DEDICATION**

To Maria and Anopaishe!

#### **ACKNOWLEDGEMENTS**

Firstly, I would like to acknowledge the grace and the love of God, through whom, all things are possible and through whose grace I have managed to complete my studies. To God be The Glory!

Secondly, I would like to tender my utmost gratitude to the Korea International Cooperation Agency (KOICA) for generously bankrolling my studies; without such financial assistance in the form of a fully-funded scholarship, my studies would not have been possible.

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#### **ABSTRACT**

Sub-Saharan Africa has a checkered record as far as democracy and institutional quality are concerned. Policymakers and development practitioners are increasingly becoming seized with the role of good institutional quality and democracy in promoting economic growth and development. Economic growth in Sub-Saharan Africa has largely been sub-optimal due to a plethora of challenges. This study empirically examines the effects of political institutions, with a specific focus on electoral disputes and democracy on economic growth in Africa from 1996 to 2016 to try to explain the poor economic performance. Electoral disputes are endemic in Africa as most elections either end up in constitutional courts or with violent clashes erupting between supporters of different political parties. The current electoral institutions do not seem strong enough to run credible, free, and fair elections whose processes and results are not controversial. The study employs the random and fixed-effects models using the Ordinary Least Squares (OLS) dynamic panel data estimation methodology. The Panel Granger causality test is also applied to determine the direction of causality between political institutions and economic growth. The study uses secondary data obtainable from the World Bank databases. A dummy variable was used to measure electoral violence, political institutions were measured using political violence and absence of violence and terrorism while democracy was measured using the Polity IV index. Empirical results have shown that electoral disputes are not significant in explaining economic growth in Africa, poor democracy levels in Africa are growth-stifling, and political institutions are significant and they positively impact economic growth. Furthermore, a unidirectional relationship is found to exist between economic growth and political institutions, with causality running from political institutions to growth. Therefore, I recommend that African governments invest time and resources in building strong institutions supportive of good economic performance.

Keywords: Institutions, Africa, Democracy, Electoral violence.

# TABLE OF CONTENTS

| DECL    | ARATION                      | i    |
|---------|------------------------------|------|
| DEDIC   | CATION                       | ii   |
| ACKN    | NOWLEDGEMENTS                | iii  |
| ABSTI   | RACT                         | iv   |
| LIST (  | OF TABLES                    | viii |
| List of | Appendices                   | ix   |
| CHAP'   | PTER 1                       | 1    |
| INTRO   | ODUCTION                     | 1    |
| 1.0 I   | Introduction                 | 1    |
| 1.1     | Statement of the Problem     | 5    |
| 1.2     | Objectives of the Research   | 6    |
| 1.3     | Research Questions           | 6    |
| 1.4     | Research Hypotheses          | 7    |
| 1.5     | Organisation of the Study    | 7    |
| CHAP'   | PTER 2                       | 8    |
| BACK    | GROUND                       | 8    |
| 2.0 E   | Electoral disputes in Africa | 8    |
| 2.1 E   | East Africa                  | 10   |
| 2.1     | 1.1 Kenya                    | 10   |
| 2.1     | 1.2 Uganda                   | 11   |
| 2.1     | 1.3 Tanzania (Zanzibar)      | 11   |
| 2.1     | 1.4 Ethiopia                 | 11   |
| 2.2 S   | Southern Africa              | 12   |
| 2.2     | 2.1 Zimbabwe                 | 12   |
| 2.2     | 2.2 Mozambique               | 13   |
| 2.2     | 2.3 Lesotho                  | 13   |
| 2.3 V   | West Africa                  | 13   |
| 2.3     | 3.1 Guinea                   | 13   |
| 2.3     | 3.2 The Gambia               | 14   |
| 2.3     | 3.3 Nigeria                  | 14   |
| 2.3     | 3.4 Cote d'Ivoire            | 14   |
| 2.4 (   | Central Africa               | 15   |
| 2.4     | 4.1 Gahon                    | 15   |

| 2.4.2 Democratic Republic of Congo (D.R.C)                                    | 16   |
|---|------|
| 2.5 The state of democracy in Africa  | 17   |
| 2.6 Coup d'états in Africa  | 19   |
| CHAPTER 3   | 21   |
| LITERATURE REVIEW   | 21   |
| 3.0 Introduction  | 21   |
| 3.1 Theoretical Literature Review   | 22   |
| 3.1.1 The theory of institutions  | 22   |
| 3.1.2 Endogenous growth theories  | 23   |
| 3.1.3 The Social Infrastructure Theory  | 24   |
| 3.1 Empirical Literature Review   | 25   |
| CHAPTER 4   | 31   |
| DATA AND METHODOLOGY  | 31   |
| 4.0 Variables and Data Sources  | 31   |
| 4.1 Choice of variables and justification                                     | 33   |
| 4.1.1 Measure of economic growth - Real Gross Domestic Product Growth (RGDP). | 33   |
| 4.1.2 Governance indicators   | 33   |
| 4.1.3 Other variables   | 34   |
| 4.1.4 Democracy   | 35   |
| 4.2 Methodology   | 36   |
| 4.2.1 Estimation techniques and model specifications                          | 37   |
| CHAPTER 5   | 43   |
| RESULTS PRESENTATION, INTERPRETATION, AND DISCUSSION                          | 43   |
| 5.0 Descriptive/ Summary statistics   | 43   |
| 5.1 Diagnosis tests results   | 43   |
| 5.1.1 Multicollinearity test results  | 43   |
| 5.1.2 Residuals normality test results  | 44   |
| 5.1.3 Stationarity test results   | 44   |
| 5.1.4 Autocorrelation test results 오류! 책갈피가 정의되어 있지 않                         | 습니다. |
| 5.1.5 Hausman test results  | 44   |
| 5.1.6 Panel Granger Unit-root test results                                    | 45   |
| 5.2 Standard Panel Data Regression Results                                    | 45   |
| 5.2.1 Discussion of Results   | 46   |
| 5.4 Panel Granger Causality Results   | 49   |
| CHAPTER 6   | 51   |
| CONCLUSION AND POLICY DECOMMENDATIONS   | 51   |

| 6.0 Summary and conclusions | 51 |
|-----------------------------|----|
| 6.1 Policy recommendations  | 53 |
| References                  | 55 |

# LIST OF TABLES

| Table 1: Summary of electoral disputes in Sub-Saharan Africa      | 17 |
|---|----|
| Table 2: Attempted coups and successful coups in Africa 2020-2022 | 19 |
| Table 3: Study variables  | 32 |
| Table 4: Summary Statistics                                       | 43 |
| Table 5: Multicollinearity test correlation matrix                | 44 |
| Table 6: Panel Granger Unit-root test results                     | 45 |
| Table 7: Main regression results for model 1                      | 47 |
| Table 8: Panel Granger Causality Results                          | 49 |

# **List of Appendices**

| Appendix 1: List of countries in the study         | . 66 |
|--|------|
| Appendix 2: Fixed-Effects Model Regression Results | . 66 |
| Appendix 3: Random Effects Regression Results      | 67   |
| Appendix 4: Hausman specification test             | 67   |

#### CHAPTER 1

#### INTRODUCTION

#### 1.0 Introduction

Why do other countries produce more output per worker than others? Why do some countries grow faster than others? These are among the most burning questions among policymakers and economists in the world. The answers to these questions have been a source of disagreements and debates as various answers have been proffered by many scholars. For example, some argue that the differences are caused by variances in human and physical capital accumulation (see Lucas, 1988; Zeng, 1997), technology and innovation (see Hasan & Tucci, 2010; Wang & Xu, 2021), the degree of integration into the world through participation in trade (Bruckner & Lederman, 2012; Didier & Pinat, 2013) and others argue that differences in institutions are responsible for disparities in economic growth rates (Acemoglu et al., 2001; 2002; Hall & Jones, 1997;1999; see also North, 1990; 2005a). "Explaining the erratic and uneven economic growth across countries and over time has been one of the most important and fascinating quests among economists and other social scientists" (Kong, et al., 2021., p. 8). Although there are many determinants of economic growth, this paper investigates the nexus between institutions and economic growth. Furthermore, whilst there are different types of institutions (e.g., economic, social, legal, and political), the focus is on political institutions, with a specific motivation for electoral disputes and democracy in Africa. I argue that the nature of the political and legal institutions and the level of democratization that exist influence the prevalence of electoral disputes.

"Underlying the litany of Africa's development problems is a crisis of governance" World Bank (2004, p.60). A considerable body of literature focuses on how governance (institutional quality) affects economic growth and development (Murphy et al., 1993; Hall & Jones, 1999; Khan, 2010; Bräutigam & Knack, 2014; Tran et al., 2021). Poor and weak

institutions in the form of absence of rule of law, lack of accountability, rampant corruption, political repression, and strict information control are common features in most African states today (Aidt, 2009; Dobler, 2011). Institutions are among the chief determining factors of economic development (North, 2005a; Acemoglu et al., 2001, Acemoglu & Robinson, 2010; North, 2016). Kaufmann et al. (2010) argue that even though institutions have attracted so much attention, still there isn't one agreed definition of institutions. Scholars and policy analysts have come up with various definitions over time. According to North (1990; 2005a), institutions are formal and informal rules that shape human economic, political, and social interactions. Schneider (1999), defines institutions as ways of exercising authority in managing a society's affairs while USAID (2002) defines institutions as a systematic interaction among structures, processes, traditions, and functions which is depicted by values of participation, transparency, and accountability.

Proponents of the institutional hypothesis stress that institutions are important in influencing economic decisions and subsequent economic growth. Governments with properly operational institutions are highly likely to protect property rights, create politically stable environments, enforce contracts and implement market-friendly policies that determine investment decisions (North; 1990; Acemoglu et al., 2002). On the other hand, poor institutions tend to stifle incentives to invest and innovate as they create uncertainties for economic agents. Consequently, countries that have strong institutions are expected to grow fast than their counterparts with weak institutions. It is therefore argued that recent growth trends have laid bare the fact that despite their levels of capital, countries can transition from low to fast growth rates if they implement institutional changes (see Hall et al., 2010). For example, the resurgence of the Chinese economy in the 1980s is credited to Mao's institutional reforms (Acemoglu, 2008). Other cases include Botswana (see Goldsmith, 1998; Lewin, 2011), Mauritius (see Zafar, 2011) in Africa, and Chile (see Kalter et al., 2004) in South America.

Economic development has generally remained very low in sub-Saharan Africa despite rapid economic development in other regions of the world such as Europe and East Asia. The sub-region is characterized by poor human development levels, low output per worker, and low levels of physical capital. More than 75% of Sub-Saharan African (SSA) countries are low-income. Recently, researchers in the field of economics have turned their attention to the important subject of institutions (see Acemoglu & Robinson, 2010; Bräutigam & Knack, 2014; North, 2016). North (1990; 2005a; 2016) has convincingly argued that institutional quality is a key determinant of economic prosperity.

Bräutigam and Knack (2014) claim that there are several reasons which can explain the poor governance in sub-Saharan Africa, but chief among them is poor institutional quality because former colonial masters did not develop strong, deep-rooted institutions that were capable of sustaining the development needs of a contemporary state. As a result, political instability, economic malaise, unsustainable debt levels, and civil wars all ravage Sub-Saharan African (SSA) countries today. Underdevelopment coupled with severe poverty stands out as a daunting impediment to human and social development in SSA (SADC, 2020).

Electoral rules are a subset of political institutions (Persson & Tabellini, 2000; Acemoglu et al., 2005). The nature of electoral rules that exist in a country and how such rules are observed determines whether elections are done peacefully and also whether the citizens will accept electoral outcomes without any challenges. Disrespect and disregard of electoral rules normally lead to problems as has been witnessed in Africa where there have been numerous cases of post-election violence and disputes, some of which ended up in the courts of law. On the other hand, democracy is built by and is a result of the interactions of a substantial number of institutionalized behaviors within society. The nature of political institutions affects elections, democracy, and governance (Leonard, n.d).

Sen (1999; 2003) emphasizes the fact that development is broad and all-encompassing. One of the key aspects of development, as argued by Sen, is freedom (development as freedom). Good political institutions must be entrenched in democratic principles that promote freedom of expression, choice, and association (be it political or otherwise). Although there is a strand of literature that argues that it is not clear whether democracy is a cause or a consequence of economic growth, since evidence on the net effect is inconclusive (e.g., Barro, 1996; Gerring et. al., 2005; Vollmer & Ziegler, 2009), democracy does not only help in the construction of policies that match the citizens' needs but is also instrumental in the achievement of free and fair elections, compliance to rule of law and reduction of corrupt behaviors (Vollmer & Ziegler, 2009). According to Sen (1999a; 1999b), it is through democracy that incentives for the creation of responsible and accountable political leaders are provided; through it, political-administrative leaders are induced not only to listen but also to act on behalf of the societies that they represent.

While much research has been done on institutions in Africa, the majority of the studies were focusing on particular regions, for instance, East, West, and Central Africa (e.g., Barasa et al., 2017; Kane et al., 2019; Osabuohien & Karakara, 2021). In particular, East African countries like Kenya and Uganda (see Barasa et al., 2017) and West African countries such as Mali, Burkina Faso, and Ghana (see Osabuohien & Karakara, 2021). The studies that covered Africa as a continent focused on institutions such as government stability, corruption, and ethnic tensions (e.g., Osman et al., 2011), and the six World Bank governance indicators (e.g., Epaphra & Kombe, 2017). A few other scholars focus on political institutions in Africa (but see Nkurunziza & Bates, 2003) and in Ethiopia (Garedow, 2021). To the best of my knowledge, there are no researches that have focused on electoral disputes. Through empirical investigation,

<sup>&</sup>lt;sup>1</sup> For more information on the six governance indicators and how they are constructed, see Kraay et al. (2010).

I intend to explore the extent to which political institutions and electoral disputes have impacted economic growth from 1996 to 2016. This study adds to the present literature by filling in this gap and may be very useful to politicians, policymakers, and academia.

#### 1.1 Statement of the Problem

Africa has suffered from economic stagnation for decades, despite rapid economic development in some parts of the world, e.g., East Asia and Europe. Could the economic malaise be a result of poor institutional quality? Countries in the African continent have been grappling with a seemingly unstoppable wave of election disputes in the past few decades. It seems most governments and election management bodies in Africa cannot run free, fair, credible, and transparent elections. Allegations of election rigging, voters' roll manipulation, violence, intimidation of opposition party supporters, chaotic vote counting, and collation of results are all rampant within the continent. As a result, controversies have marred most election outcomes in recent decades. To add to the electoral disputes is the fact that when some of these disputes spill into courts, the judicial systems appear not to be impartial as almost all the rulings are passed in favor of the incumbent presidents which also cast doubts on the soundness of legal institutions in Africa. It is crucial to note that elections are the bedrock of democratic governance and political stability, hence electoral disputes put into question the quality of legal and political institutions within a country.

In addition to the problem of electoral disputes, Africa is also suffering from a spate of coup d'états. Loanes (2022) notes that in the previous 18 months as of 5 February 2022, there had been seven coups and attempted coups in African nations, mostly in the West African states of Guinea, Chad, Mali, Sudan, Burkina Faso, Niger, recently in Guinea-Bissau (February 2022), Djibouti (February 15, 2022) and Burkina Faso (September 30, 2022). Political analysts have argued that there are also incidences of constitutional coups in Africa, where sitting presidents manipulate constitutions to extend their terms of office. Examples are Cote d'Ivoire and Guinea

in 2020, Burundi and Congo in 2015, and Rwanda in 2017. It is alleged that the Tunisian president governs through decrees, and he doesn't have institutional controls over his power. In Zimbabwe, the 2013 constitution which placed limits on the presidential terms to two, is on the verge of being amended by the ruling regime, a threat to the recent gains on limiting presidential terms of office.

Another problem that exposes the quality of political institutions in Africa is that of conflicts and ethnic fights. For example, Ethiopia, Northern Mozambique, South Sudan, and Somalia are all embroiled in ethnic conflicts. Some of the conflicts are a result of disputed elections, violations of constitutions, and fights over control of key resources, like in the Mozambican case.

#### 1.2 Objectives of the Research

The major objective of this research is to investigate the relationship between political institutions and economic growth. Specifically, the research sets out to:

- Empirically examine how electoral disputes affect economic growth;
- Assess the direction of causality between political institutions and economic growth;
- Investigate whether democracy affects economic growth or not.

#### 1.3 Research Questions

The major research question is: To what extent have political institutions and democracy affected economic growth in Africa? Specifically, the following research questions will be answered:

- Do electoral disputes affect economic growth?
- What is the direction of causality between political institutions and economic growth?
- Does democracy lead to economic growth?

#### 1.4 Research Hypotheses

The hypotheses for this paper are stated as:

- Electoral disputes affect economic growth negatively;
- There is a two-directional connection between political institutions and economic growth; and
- Low levels of democratization harm economic performance.

#### 1.5 Organisation of the Study

The remaining part of this paper is structured as follows: Chapter 2 presents the background on electoral disputes and economic growth, Chapter 3 is a literature review, Chapter 4 presents the data sources and the methodology used in the paper, and Chapter 5 presents the results and findings, and the policy recommendations and conclusion are in Chapter 6.

#### **CHAPTER 2**

#### **BACKGROUND**

#### 2.0 Electoral disputes in Africa

Elections are the bedrock of political stability and democratic governance. It is only through an election that a government gets its democratic mandate to rule, and is also held accountable for everything that it does. The 1990s ushered in a wave of multi-party democracy and as a result, momentous advances have been made to consolidate the gains of democracy across Africa. Civil society in Africa has pushed for a plural democratic society in the conviction that it will contribute to the advancement and accomplishment of good governance. However, just as this hope of a better level of democracy was budding, electoral developments in some African countries seem to be thrashing these hopes for good governance. This is because electoral disputes in countries such as Zimbabwe, Kenya, Cote d'Ivoire, Uganda, Gabon, Ethiopia, Mozambique, Guinea, The Gambia, and D.R.C among others have shown that the manner in which elections are being conducted is posing serious threats to democratic governance, political stability and peace not only in the countries concerned but, in the continent, at large.

For the purposes of this research, an electoral dispute is defined as an argument or confrontation between two or more parties that emanates from alleged fraud or manipulation of the process or the outcome of an election. An electoral dispute can be grand i.e., involving physical clashes between the supporters of any two presidential candidates, escalation of the matter to the courts of law, or be marked by post-electoral violence which often results in loss of life. It can also be petty i.e.; a losing candidate may just make sensational claims that the elections were marked by some irregularities but their claim lacks substance and no further

consequences erupt from such a claim. Grand forms of electoral disputes are the focus of this research.

Electoral disputes are either a cause or a consequence of weak political institutions. There is an inextricable link between politics and the judiciary in Africa. Most of the disputed elections end up as court cases. Once the issues get to court, normally the disputed electoral results are upheld. Evidence from the continent shows that the constitutional courts in Africa are also somehow responsible for perpetrating election controversies as their judgments do not seem to be impartial. This brings into question the legal institutions that exist in Africa. Election management bodies in Africa seem to lack the funding and technical capacity to handle elections in a free, fair, credible, and transparent manner, which undermines the integrity of the electoral process. A closer look at both the matured and nascent democracies in Africa shows that despite efforts by opposition parties and civil society organizations to push for reform of electoral laws and the electoral management bodies, there is resistance on the part of the sitting presidents because of the existing institutional framework is designed to favor them. This creates suspicion way before the elections are held, leading to disputes and violence, which leads to political instability.

The causes of election disputes vary from context to context. However, one common thing in most African countries is that some presidents are power-hungry and they stay for too long in power. As a result of such power-hungry leaders, elections are normally marred by vote fraud and many other irregularities so that they secure and prolong their stay in power. Consequently, opposing candidates oftentimes contest election results. In some cases, the disputes are settled peacefully, while in some cases post-election violence is witnessed for long periods thereby causing long-term instability. Examples of current African presidents who have stayed for so long in power (in office) include Teodoro Obiang Nguema of Equatorial Guinea, (43 years), Paul Biya of Cameroon (40 years), Sassou Nguesso of Congo-Brazzaville (36 years),

Uganda's Yoweri Museveni (36 years), Idriss Deby of Chad (32 years), the only president Eritreans have known since independence, Isaias Afwerki (29 years). Former long-time presidents include Mugabe who ruled Zimbabwe for 37 years and Muammar Muhammad Abu al-Gaddafi who was Libyan president for 42 years. I suppose that a prolonged stay in power is one of the reasons which lead to electoral disputes. As part of the institutional reforms, African states should consider limiting presidential terms of office to two, in line with international best practices as seen in most of the advanced countries. The following are cases of disputed elections by region.

#### 2.1 East Africa

#### **2.1.1 Kenya**

There have been several incidences of disputed elections in Kenya recently. In 2007, Odinga disputed the results of an election after he lost to Kibaki. What followed was a series of violence that is estimated to have killed about 1,000 people and displaced about 600,000 others (BBC, 2008). The 2007 political impasse was solved by a power-sharing deal between Odinga and Kibaki. Furthermore, in 2012, Odinga lost again to Kenyatta in another general election and took the matter to court, but without success. Odinga garnered 43.7% of the vote, versus Kenyatta's 50.51%. Another case of a disputed election in Kenya was in 2017 when Odinga got 45% of the votes versus Kenyatta's 54% and again, the former did not concede defeat. The matter ended up in the courts, but unfortunately, the results were upheld in favor of Kenyatta. In August 2022, Odinga narrowly lost to William Ruto, leading to a constitutional court appeal of the result by Odinga, who claims that there was electoral fraud. The court upheld the result in favor of Ruto.

#### **2.1.2 Uganda**

There have always been electoral disputes in Uganda since 2016 when Museveni won by 61% against the main opposition candidate, Besigye's 35%. The elections were allegedly characterized by fraud, manipulation, intimidation, and arrest of opposition members. History repeated itself in 2021 when Museveni controversially won by 58.64% against Bobby Wine's 34.83%. Bobby Wine alleged that the elections were not fair, and transparent and implored his supporters to reject the results. This created serious political tensions in Uganda.

#### 2.1.3 Tanzania (Zanzibar)

Zanzibar is a semi-autonomous governing Island that is part of the United Republic of Tanzania. Whilst it is part of mainland Tanzania, the Island has the autonomy to elect its president as well. In 2015, there was a controversial election in Zanzibar as there were allegations of serious electoral fraud, and the elections were deemed not to be free and fair by opposition groups. After the election results were announced, the incumbent, Shein was announced as the winner. However, the opposition leader, Hamad announced himself a winner too. Due to overwhelming allegations of electoral irregularities, the elections were annulled and a re-run was set for March 2016. The opposition ended up pulling out of the re-run claiming that it was rigged again, and just like the 2015 plebiscite, it was marred with a lot of grey areas too.

#### 2.1.4 Ethiopia

Africa's second-most populous nation held an election in June 2021. Ahmed was announced the outright winner of the election but this faced concerns by opposition parties who claimed that the elections lacked integrity. This controversial and disputed election was the first multi-party election in Ethiopia in 16 years. Credibility concerns rose from the fact that opposition parties claimed the election was not free and fair. Consequently, conflicts arose in the Northern Tigray region and other regions as well. The conflicts were also a result of the

failure of a lot of other people to vote as a lot of opposition supporters were arrested and jailed. Alberti (2021) notes that this was the first attempt by Ethiopia to run a free and fair election, but it unfortunately failed.

#### 2.2 Southern Africa

#### 2.2.1 Zimbabwe

In March 2008, Zimbabwe held general elections in which the then main opposition leader, Morgan Tsvangirai won by 47.9% against the incumbent Robert Mugabe's 43.2%, according to official statistics released by the country's electoral management body. However, controversy marred this outcome as the opposition claimed that the results were manipulated since it took more than a month for the results to be announced, they claimed that they had won with a resounding victory. On the other hand, this outcome put the opposition at a disadvantage as they failed to win with a 50% plus 1 vote majority so that they could take over power, as required by the constitution. There was, therefore, a need for a re-run of the election. The rerun was scheduled for June 27, but unfortunately, before the elections, there were numerous scenes of violence as Mugabe unleashed a reign of terror on opposition supporters, until on the night before the day of the re-run, Morgan Tsvangirai pulled out of the election citing too much violence against his supporters. Mugabe went on to stage a one-man race, where he claimed outright victory. The controversy continued and SADC intervened to end the political crisis. The country ended up with a power-sharing deal between Mugabe and Tsvangirai.

In 2013, another general election was held and again, the opposition led by Tsvangirai claimed that Mugabe rigged the elections. Controversy continued to trail the Zimbabwean election landscape; in 2018 there was another incident of disputed election wherein Emmerson Mnangagwa of the ruling ZANU PF party was accused of having rigged the elections against his arch-rival, opposition leader Nelson Chamisa. Mnangagwa had won with 50.08% against

Chamisa's 44.3%. The matter was taken to the constitutional court which ruled in favor of Mnangagwa and upheld the result as being final. There has been a political impasse in the country ever since then, and it has resulted in legitimacy questions as Chamisa and his supporters refuse to acknowledge the presidency of Mnangagwa.

#### 2.2.2 Mozambique

There have been serial electoral conflicts in Mozambique since 1994. In fact, since its Independence in 1975, the ruling party FRELIMO has always been at loggerheads with the opposition, another liberation war movement, RENAMO. Prominent electoral disputes were in 1994, 2004, 2014, and 2018. 2018 elections which were won by FRELIMO were again disputed by the opposition which claimed that there was vote-rigging and manipulation. In addition to these electoral controversies, there is a terrible Islamic insurgency in the Northern part of Mozambique and it has contributed to the political instabilities that exist in the country as a result of the electoral disputes.

#### 2.2.3 Lesotho

Lesotho, a Southern African nation has also not been spared from the scourge of electoral disputes. In 2007, there were serious post-election controversies, conflicts, and complaints. The opposition parties in the country complained about the state of the voters' role which they said was in a bad shape. Furthermore, they claimed that the relationship between the ruling party and the electoral commission was suspicious hence the electoral commission had no incentive to act impartially in the discharge of its duties.

#### 2.3 West Africa

#### **2.3.1** Guinea

The West African country conducted some elections in October 2020 and Alpha Conte was declared a winner with 59.5% of the total votes cast. Diallo, the main opposition's losing

candidate disputed the results and lodged an appeal at the Constitutional Court but without success. Diallo went on to call for massive protests and demonstrations against both the outcome of the elections and the court's judgment.

#### 2.3.2 The Gambia

In December 2016 there were presidential elections in The Gambia and opposition candidate Adama Barrow won against the incumbent Yahya Jammeh, who had been president for 22 years. At first, Jammeh conceded defeat but suddenly reversed his decision after 1 week and claimed that the electoral board had not been honest and impartial in its conduct during the election. He, therefore, rejected the election outcome in its entirety. What followed next was political instability and bickering which led to Jammeh fleeing to Equatorial Guinea. As a result, there was military intervention by ECOWAS.

#### 2.3.3 Nigeria

The West African state faced severe political violence before, during, and after the 2019 presidential elections in which President Buhari was announced as the winner for the second term of office. The political violence which characterized this election was unprecedented. In addition to this problem, Nigeria is struggling with an Islamic insurgence being masterminded by the militant Boko Haram group since 2009 in the Northern parts of the country.

#### 2.3.4 Cote d'Ivoire

As rampant as electoral disputes are in Africa, Cote d'Ivoire, a West African country has not been an exception. Of note is an election that was held in the country on 31 October 2010. The leading candidate Gbagbo, who was the incumbent, and Ouattara got 38% and 32% of the votes respectively. Unfortunately, none of them garnered majority votes to take over power and as a result, a run-off was scheduled for 28 November 2010. In the run-off, Ouattara was acknowledged the winner by means of 54.1% of the votes, versus Gbagbo's 45.9%. However, the constitutional court nullified the results for thirteen constituencies claiming that

there was electoral fraud. This led to an announcement of new results wherein Gbagbo was announced the winner with 51.4% versus Ouattara's 48.5%. From the unfolding events, which showed so many inconsistencies, it is clear that confusion was reigning supreme in Cote d'Ivoire. Consequently, both candidates were declared winners by their supporters and were sworn in as Presidents. This led to political turmoil as the country ended up with two presidents.

The world also got torn apart due to this turmoil as the global community recognized Ouattara as the winner. ECOWAS and the AU implored Gbagbo to step down, and further placed him under some financial and travel restrictions. Furthermore, ECOWAS even threatened military intervention. Within the country, fighting between opposing groups broke out, setting the stage ripe for a fully-fledged civil war.

#### 2.4 Central Africa

#### 2.4.1 **Gabon**

Gabon is a Central African country that, like most of its African counterparts, has not been spared from electoral controversies. On September 2 in 2016, presidential elections were held and the incumbent Ali Bongo was re-elected for another term of office, with 49.8% of the total votes cast. However, this did not go down well with the main opposition candidate, Jean Ping, who, despite losing the election, went on to announce himself the winner of the election and he even went on to claim that the whole world knows that he is the President of Gabon (BBC, 2016). Ping complained about the rigging of votes and improper conduct of the electoral board. He went on to file a complaint with the constitutional court but like in every other election court appeal in Africa, he lost the case. The aftermath of the court ruling was a violent protest in Libreville, the country's capital. In the clashes, 7 people were killed and an estimated 1000 others were arrested (BBC, 2016). Commenting on the elections, the European Parliament said that the elections were not transparent and raised a lot of doubt, and it went on to say that

in passing its judgment, the constitutional court failed to consider some irregularities that were noted in certain provinces during the elections.

#### 2.4.2 Democratic Republic of Congo (D.R.C)

D.R.C. was embroiled in a nasty electoral dispute in 2016 following the 20 March election which was controversially won by President Denis Sassou-Nguesso after he garnered 60% of the votes. This victory was strongly rejected by opposition figures as they claimed that the election was fraught with irregularities which included a voters' roll that was in shambles to the extent that most people did not find their names on the voters' roll despite having registered to vote, and the bizarre thing was that names of people who had died as far back as five years before were still on the roll (Elion, 2016). To say the least, the elections were very chaotic, which casts so much doubt over the election's credibility. Despite loud calls for the election to be nullified due to a lot of irregularities, the constitutional court went on to validate the results in favor of Sassou-Nguesso on 4 April 2016. On the same day, violent protests broke out and 17 people were killed in the violent clashes.

The election landscape in Africa paints a gloomy picture. The incidence of electoral disputes is escalating at quite an alarming rate. In recent decades, elections in Africa have been shrouded in controversy. After going through all the events that have unfolded, one is left wondering and struggling to answer so many questions. These include, why are electoral disputes so rampant in Africa. How can Africa achieve free and fair elections? How can sitting presidents be encouraged to accept defeat? How best can electoral disputes be solved when they occur? Answers to these questions may not be too obvious. However, the institutional hypothesis can help in answering some of these questions. The political and legal institutions in Africa need to be examined to see if they are fit to support modern-day democracy and smooth power transitions to avoid electoral disputes. Table 1 summarizes the electoral disputes by region.

Table 1: A summary of Sub-Saharan Africa electoral disputes by region, 1994-2016

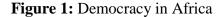
| Region   | No.    | of  | Description  | Evaluation                                  |
|----------|--------|-----|--|---|
|          | disput | tes |  |   |
| Southern | 19     |     | This is the region with the highest number of  | Generally, the causes of these disputes     |
| Africa   |        |     | disputes in Africa. Most of the disputes emanate   | are more or less the same across the        |
|          |        |     | from poor voters' rolls and manipulation of the  | different regions. Additionally, the        |
|          |        |     | vote counting process.   | consequences are also the same, as they     |
| East     | 14     |     | The region has the third highest number of   | all include court actions where the ruling  |
| Africa   | 14     |     | disputes after Southern and West Africa.   | is always in favour of the incumbent, or    |
|          |        |     | majority of the disputes stem from corrupt   | violent clashes between supporters of the   |
|          |        |     | handling of the electoral processes, voter's roll manipulation and lack of freedom to campaign | losing and those of winning candidates.     |
|          |        |     | by opposition parties.   | Electoral disputes have become the          |
| Central  | 12     |     | This region has the least number of disputes.  | norm, such that, an election is rarely      |
| Africa   |        |     | Their prevalence is a result of dictatorial  | conducted and both parties are equally      |
|          |        |     | tendencies by the incumbents who instil fear in  | satisfied that it was fair, transparent and |
|          |        |     | voters so that they are always voted back into   | free and credible.                          |
|          |        |     | power. Elections are also not free, fair and   | The rate at which violence scents are       |
|          |        |     | credible.  | witnessed may be pointing to more           |
| West     | 15     |     | West Africa is second to Southern Africa in  | trouble in the future if these issues are   |
| Africa   | 13     |     | terms of the number of disputes. This region is  | not dealt with by simply accepting          |
| Allica   |        |     | famous for allegations of elections being stolen,  | clarity, accountability and transparency    |
|          |        |     | lack of transparency in electoral processes and  | in the running of elections.                |
|          |        |     | entirely opaque ways of vote counting.   | in the running of elections.                |

Note. Author's own elaboration

#### 2.5 The state of democracy in Africa

One of the marks of a democratic country is free, fair, and credible elections every time. Nevertheless, it is vital to note that some nations can still have elections under autocratic regimes. While Africa has been characterized by democratic gains, it has recently suffered major setbacks since (Freedom House, 2022). In the African states where elected presidents are deposed in coups, the coup plotters claim that they are upholding democratic principles but

once these unelected officials take over power, political rights decline sharply (Freedom House, 2022). In some extreme cases, e.g., in Sudan in 2021 when the military took over power, it declared a state of emergency and decreed that elections will not be held till 2023. The Freedom House further notes that some undemocratic leaders continue to manipulate political systems and influence institutions responsible for elections, which results in the jeopardizing of the rights and well-being of citizens across the continent of Africa. As a consequence of the infringements of the democratic principles of accountability, pluralism, and equality, most countries in Arica are poorly rated in terms of democracy. The majority of African states are classified as authoritarian regimes whiles a few are in the weak/low- to mid-performance range and hybrid range and very few are in the high-performance range. Figure 1 shows the state of democracy in African states.





Note. The global state of democracy indices, World Bank (2022)

#### 2.6 Coup d'états in Africa

A pertinent question that comes to mind is do coups compromise democracy? The African continent has been hard hit by a wave of coups, especially the West African sub-region. This trend threatens to take the continent back to the period of the 1980s when military rule was common, before the adoption of multi-party democracy in the 1990s. Recently, the West African States such as Mali, Guinea, Chad, Sudan, and Burkina Faso have had democratically elected presidents overthrown and the military took over. To add to that, there have been failed coup attempts in Niger (31 March 2021), the Central African Republic (December 2020), and Guinea Bissau (1 February 2022). Coups are considered a threat to consolidated and fully-fledged democratization (Belkin & Schofer, 2003; Collier, 2008). Table 1 shows the number of failed and successful coups in Africa in recent years.

**Table 2:** Attempted coups and successful coups in Africa 2020-2022

| Country                      | Period                      | Status             |
|------------------------------|-----------------------------|--------------------|
| Mali                         | August 2020                 | Successful         |
| The Central African Republic | December 2020/January 2021  | Attempted (Failed) |
| Tunisia                      | July 2021                   | Successful         |
| Guinea                       | September 2021              | Successful         |
| Sudan                        | September 2021/October 2021 | Successful         |
| Burkina Faso                 | January 2022, October 2022  | Successful         |
| Guinea Bissau                | February 2022               | Attempted (Failed) |
| Mali                         | May 2022                    | Attempted (Failed) |

Note. Author's compilation

According to Adetunji (2022), since 2010, there have been over 40 coups and attempted coups in Africa, with the West African sub-region leading at 44.4% of the coups since 2010. Burkina Faso has made history by registering two coups in less than ten months (i.e., January and October 2022). With every coup that is added to the list, it lays bare the fact that democracy is compromised (Thyne & Powell, 2014), and that democracy is largely superficial rather than real. While some military regimes that take over power claim that they will aim to solve poor

governance practices, the coups compromise democracy. Despite being autocratic, these regimes are celebrated in these African countries. According to the United States Cornell University, on average, democracies lead to better economic growth outcomes and perform better in terms of public service provision.

#### **CHAPTER 3**

#### LITERATURE REVIEW

#### 3.0 Introduction

This section is going to look at the theories and empirical findings relevant to the study. Before discussing the various theories, scholarly literature, and recent developments in institutional economics, we first need to define institutions. A precise definition of the term institutions is elusive, however, there is a similarity to other terms such as 'governance' which are also difficult to pin down (Mbaku, 2010; Vishney & Schneider, 2014). The words 'institutions' and 'governance' can be used interchangeably. According to North (1990), "institutions are formal and informal rules that shape human economic, political, and social interactions" (p.35). Schneider (1999), defines institutions as ways of exercising authority in managing a society's affairs while USAID (2002) defines institutions as a systematic interaction among structures, processes, traditions, and functions which is depicted by values of participation, transparency, and accountability. For the purposes of this research paper, institutions are defined as informal and formal rules that shape human economic, political, and social interactions (North 1990; 2005a).

Having defined institutions, let us now turn to the historical background of the state of institutions in Africa. According to the World Bank (2004), Africa's problems are a result of a crisis of governance. There is sufficient evidence that supports this evaluation. Several studies have shown that Africa, in general, has historically suffered from the problem of bad institutions that were inherited from former colonial masters (Samuelson, 1988; Hall & Jones, 1999; 2002; see also Acemoglu et al., 2010). Colonizers set up good institutions which were supportive of development in countries that had good and favorable climates, as they had prospects of staying in these areas for long while they set up extractive institutions which did

not promote development in tropical countries or where population density was too high, as they had no prospects of staying in these areas for long periods (Besley, 1995; Knack & Keefer, 1995; Banerjee & Iyer, 2005; Acemoglu et al., 2010). Extractive institutions are detrimental to growth while private property institutions encourage investment, leading to economic growth. Based on the foregoing, the current state of institutions in Africa in general, and SADC in particular, can be traced back to the colonial origins of these states. However, these studies do not explain what African leaders are doing to change the nature of institutions in their countries, as institutions can be changed.

#### 3.1 Theoretical Literature Review

There are various theories that explain the notion of economic growth; the ones relevant to its nexus with institutional quality are herein discussed.

#### 3.1.1 The theory of institutions

This theory was proposed by North (1990). North defines institutions as "rules of the game" which shape human political, economic, and social relations. The institutions are either informal or formal. Formal ones include the constitution, acts of parliament, statutes, and bylaws while informal institutions include the common law, taboos, customs, and traditions. According to this theory, economic performance is fundamentally determined by institutions. The hypothesis asserts that institutions determine long-run economic performance. Essentially, institutions reduce uncertainty in society by creating a solid footing for interaction, though at the same time imposing constraints on them. By their very nature, institutions can either induce productivity increases or can reduce productivity in a country. Another characteristic of institutions is that they tend to evolve. Institutional change across time can as well result in productivity changes, either for the better or for worse, depending on the nature of the changes. Successful institutions or institutional change lowers transaction costs, permits the capturing

of gains from trade, and allows an expansion of markets. As a result, productivity levels increase, resulting in economic growth. By and large, the theory of institutions emphasizes that economic performance is determined by institutions. Based on this theory, it is clear that the nature of political institutions, among other institutions, in a country ultimately determines the level of economic performance. Formal rules such as constitutions determine how long a president stays in power and also how well elections are conducted, which also determine the incidence of electoral disputes, depending on how well these rules are adhered to. Good political institutions, therefore, permit long-run economic growth in a country.

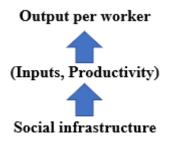
#### 3.1.2 Endogenous growth theories

According to endogenous growth theorists (see Romer, 1986; Lucas, 1988), economic growth is fundamentally derived from endogenous factors and not exogenous factors as proposed by neo-classical growth theorists. This theory proposes that human capital investment, knowledge, and innovation are the important factors that drive growth. As the theory states, human capital investment has positive spill-over effects on the economy which help in mitigating the diminishing returns associated with capital accumulation. Furthermore, the theory holds that the economy's long-run growth path is dependent upon the policy measures that are implemented in a country. For instance, subsidies for education or research & development increase the incentive for innovation hence leading to increases in growth rates. The endogenous growth models imply that policies that allow competition, openness, and innovation will promote economic progress. On the other hand, policies that are restrictive to change and innovation are likely to slow down growth over time. Following these theories, socioeconomic, political, and legal institutions are all endogenous factors and as such, they collectively affect economic growth. Given the endogenous nature of political institutions, bad

politics, electoral disputes, and political uncertainty are expected to impact negatively economic growth.

#### 3.1.3 The Social Infrastructure Theory

This hypothesis states that the economic performance of a nation is primarily dependent upon its social infrastructure. According to Hall and Jones (1999), social infrastructure variations among countries cause differences in incomes among them. Social infrastructure refers to "the institutions and government policies that determine the economic environment within which individuals accumulate skills, and firms accumulate capital and produce output" (Hall & Jones, 1999, p.84). A country's institutional framework can either encourage production or can encourage predation in the form of rent-seeking, theft, and corruption. A social infrastructure that provides an environment conducive to education attainment, capital accumulation, and technology transfer results in more output per worker. As such, there will be high returns to economic activities. Such a social infrastructure is also characterized by social institutions which offer protection to the output of individuals from both private and public diversion. Countries with poor social infrastructure that favors predatory activities have lower levels of output compared to those with good social infrastructure. Higher output per worker will mean better economic growth prospects. In this theory, Hall and Jones summarize the causes of disparities in economic performance among different countries as shown below:



This implies that social infrastructure is a determinant of productivity levels which then determines output per worker. Good governance and sound policies therefore should create good social infrastructure, which must promote economic growth.

# 3.1 Empirical Literature Review

A great deal of research has investigated the impact of different types of institutions on economic growth using cross-country data (see Knack & Keefer, 1995; Acemoglu et al., 2010; Barasa et al., 2017). These studies concur that institutions are strongly related positively to economic growth. The mechanism is that good governance results in strong institutions that are supportive of private property rights, which in turn encourages investment, leading to economic growth. On the other hand, poor institutional quality results in bad economic outcomes such as stagnation in income, high rates of unemployment, unsustainable debt levels, and run-away inflation (World Bank, 2012; Pere, 2015). Poor institutional quality is therefore detrimental to growth. A limitation of cross-country studies is that they suffer from a methodological weakness as it is difficult to control for country-fixed effects. However, their strength lies in being all-inclusive.

Jacho-Chavez and Huynh (2009) empirically studied the link between governance and economic growth in SSA using a nonparametric method. The study indicates that political stability, rule of law, and voice and accountability are all statistically significant whereas government effectiveness, regulatory quality, and control of corruption are all not significant (see also Shleifer et al., 2004). The strength of these findings is that they include all six governance indicators, unlike other studies that rely on only selected indicators. On the other hand, using cross-section data for 197 states from Latin America, Africa and Asia while employing the Two-Stage Least Square method, Emara and Jhonsa (2014) explored the linkage between income per capita and improvements in the quality of governance between 1990 and

2011. The research demonstrates that there is a solid association between governance quality and per capita income – a positive relationship running from high per capita incomes to good governance was found to exist (see also Kaufmann et al., 2002). However, one major shortcoming of the findings is the difficulty of controlling for heterogeneity within cross-sectional units.

After looking at the effects of institutions on economic growth in general, let us now turn our attention to specific types of institutions. Mauro (1995) analyzed the effects of corruption, red tape, judiciary system efficiency, and different categories of political stability on economic performance using panel data for seventy developing countries. Results of the research show that corruption lowers investment, thereby retarding economic growth. Mauro concludes that corruption and bureaucratic efficiency indices were both significantly related to per capita GDP over the years 1975 to 1995. Several other studies support these findings and conclude that corruption and bureaucratic inefficiencies, which are both rampant and pervasive throughout Africa are distortionary (e.g., Sachs, 2012; Robinson, 2013; Smith, 2015; see also Acemoglu et al., 2017). The World Bank (2012) argues that corruption in some countries amounts to a large fraction of their gross national product (GNP) and is detrimental to economic growth. However, contrary to these researches, very few studies show that corruption may stimulate economic growth by acting as a catalyst to speed up how things are done in bureaucracies (but see Leff, 1964; Samuelson, 2008).

Rule of law is another important institutional factor that is central within the governance matrix. According to Morita and Zaelke (2007), the nexus between rule of law and economic development is strong and positive. Using a dynamic panel regression model with 47 developing countries, the study shows that an improvement in the rule of law indicator by 0.1 standard deviations causes to a 1.3% growth in the economy. Countries do not only need to make good laws and regulations but also to strictly enforce those laws and regulations. Contrary

to these findings, another strand of the literature shows that rule of law is insignificant in explaining economic growth (cf. Dobler, 2011; North, 2016). This strengthens the existing debate in the institutional economics framework, (see also Bräutigam, & Knack, 2014).

Whereas the connection between political stability and economic performance is well-documented, the empirical findings always give different results on the direction of causality. One strand of literature argues that the relationship runs from political stability to economic growth (see Campos & Nugent, 1999; North 2016). The second one argues that causality runs from economic growth to political stability and democracy (the more advanced economically, the more democratic) (see Kirmanoglu, 2003) and the other stream of literature argues there is a bi-directional causality between economic growth and democracy (see Zablotsky, 1996). In addition to the variations in terms of the findings, literature is replete with differences in terms of the measures of political institutions, methodologies, and samples of countries/regions used. However, the majority of the studies use GDP per capita (sometimes with natural logs) as a dependent variable, using the panel data methodology (see Alesina et al., 1992; Campos & Nugent, 1999; Tran et al., 2021; United Nations [U.N.], 2021).

Using the panel granger causality analysis, Chong & Calderon (2000) examined the path of causation between economic development and political institutions using a panel of 35 countries and concluded that there is two-way causality, running from political institutions to economic development and vice versa (see also Lee & Kim, 2009; Goes, 201). Contrary to that, another strand of literature argues that there is a unilateral impact running from institutions to economic growth (cf. Justesen, 2008; Nawaz, 2015). Furthermore, the direction of causality is also found to vary between developing and developed countries (Law et al., 2013).

Scholars such as De Haan and Siermann (1996) and Alesina et al. (1992) presented two explicit theoretical opinions to explain how political instability slackens economic growth.

Alesina et al. applied the 2SLS method using panel data and applied the concept of uncertainty to present their argument. When there is a high propensity to change governments (an indicator of political instability), there will be uncertainty regarding the policies of the new government. The findings of Alesina et al. show that where governments are changed too often, economic growth is noticeably slow. On the other hand, De Haan and Siermann (1996), used a set of 97 countries between 1963 and 1988 and a dummy variable for political stability. The conclusion was that politically unstable countries suffered from the problem of uncertainty which compromised economic agents' confidence in the economy, ultimately impacting negatively on economic growth (see also Goldsmith, 1987; Campos & Nugent, 1999). Following these findings, I hypothesize that political institutions and electoral disputes have the potential to create uncertainty and dent confidence levels in a country, which affects variables like foreign direct investment (FDI) and trade, leading to poor growth.

Aisen and Veiga (2013) explored the impacts of political instability on economic growth, with a sample of 169 states for the period 1960 to 2004 using the GMM method. The results show that political instability lowers productivity growth rates and human and physical capital accumulation rates, leading to reductions in GDP per capita. In a similar study, Alesina et al. (1996) examined the impacts of political instability on per capita GDP growth rates of 113 countries from 1950 to1982. They concluded that there is a negative relationship between political instability and economic growth. Furthermore, Tran et al. (2021) investigated the effects of political institutions on economic growth in 48 Asian countries between 2005 and 2018 using the quantile regression methods with panel data. Political institutions were found to significantly affect economic growth. However, good political institutions were found to have a greater effect on lower-income Asian countries than on higher-income countries.

The U.N (2021) examined the directions of causality between political institutions and economic growth (log of GDP per capita), using a panel granger causality analysis. A

unidirectional causality was established. Key conclusions made were that the effects of political institutions on economic growth differ depending on a country's level of economic development. More depends on the measure of economic development used as better institutions lead to economic growth in terms of the human development index (HDI) in low-income countries whilst in high-income countries political institutions are important for growth when GDP per capita is used. This has important implications for policy because policies for growth should take into account both a country's stage of development and the particular aspect of development that policymakers intend to promote (whether its growth in income or human development).

After looking at the empirical literature on political institutions and economic growth, let us now turn our attention to democracy and economic growth. Using panel data regression with fixed effects, non-fixed effects, and random effects and a sample of countries drawn from the Middle East, Latin America, and East Asia, and taking data at five-year intervals, Gerring et al. (2005) concludes that while changes in democracy or regime type (autocratic or democratic) do not have immediate impacts on economic growth, democracy in the long term leads to strong economic performance. The Polity 2 variable was used as a measure of democracy in the research. On the other hand, some studies argue that democracy either hurts growth or has no effect at all as countries with autocratic political regimes can grow faster at the same pace or even faster than those with democratic regimes (Barro, 1996; Yi Feng, 1997). Persson and Tabellini (2003) in their book The Political Effects of Constitutions make use of various empirical methods to estimate the causal effects of constitutions, forms of government, and electoral rules using cross-country data. They show that regime types and constitutions have important economic effects. According to Blume et al. (2009), while constitutionalism matters, electoral systems are found to matter most. Additionally, the electoral processes and rules and how they are respected by political regimes or institutions ultimately have an impact

on economic outcomes (Persson & Tabellini, 2003; Acemoglu, 2005; Blume et al., 2009). Whilst the analysis and empirical findings by Acemoglu (2005) and Blume et al. (2009) are an extension of the work of Persson and Tabellini (2003), all the pieces of literature shade important insights, albeit from different perspectives, on the importance of political institutions, constitutions, democracy, and electoral rules in determining economic growth.

Adsera et al. (2003) argue that the quality of political institutions is one of the most significant factors determining the nature of economic institutions in a country. A well-functioning democracy enables political competition and a system of checks and balances which restrict the ability of the government to engage in rent-seeking activities and holds it accountable. This leads to more investment-friendly rules and regulations, independent state institutions like the judiciary and also strong regulatory bodies (North & Weingast, 1989; North, 1990; Olson (2000).

#### **CHAPTER 4**

#### DATA AND METHODOLOGY

# 4.0 Variables and Data Sources

The data for this study will cover the period from 1996 to 2016. It is taken at five-year intervals for the years 1996, 2001, 2006, 2011, and 2016. In total, it covers a 25-year period. The reason for the five-year intervals is that institutional changes are not likely to have an immediate impact on economic growth rather the impacts are likely to be noticed in the long run (see also Gerring et al., 2005). I, therefore, hypothesize that a change in institutional quality in the present year may have an average of five years before its effects on economic growth can be noticed. Similarly, election disputes in the current year may take up to five years on average before they can start to significantly affect economic growth. Table 2 shows the dependent, independent, and control variables in the study.

**Table 3: Study variables** 

|  | a. Dependent Variable  |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|--|
| Variable   | Description  | Source of data                           |  |  |  |  |  |  |
| Real Gross Domestic Product (GDP)                | "The Annual percentage growth rate of GDP per capita based on            | World Bank (Development Indicators)      |  |  |  |  |  |  |
|  | constant local currency. GDP per capita is gross domestic product        |  |  |  |  |  |  |  |
|  | divided by midyear population" (World Bank, 2022).                       |  |  |  |  |  |  |  |
|  | The study takes natural logs for real GDP.                               |  |  |  |  |  |  |  |
|  | b. Independent Variables   |  |  |  |  |  |  |  |
| Variable   | Description  | Source of data                           |  |  |  |  |  |  |
| Rule of Law (Proxy for legal institutions)       | "The degree to which citizens adhere to society's rules, it includes     | World Bank (World Governance Indicators) |  |  |  |  |  |  |
|  | property rights, quality of contract enforcement, the courts, and the    |  |  |  |  |  |  |  |
|  | police" (Kraay et al., 2010).  |  |  |  |  |  |  |  |
| Political Stability and Absence of Violence &    | "Captures the likelihood of the government being destabilized or         | World Bank (World Governance Indicators) |  |  |  |  |  |  |
| Terrorism (Indicator for political institutions) | removed by unconstitutional means or violence" (Kraay et al., 2010).     |  |  |  |  |  |  |  |
| Polity IV Index                                  | A measure of democracy.  | World Bank, Center for Systematic Peace  |  |  |  |  |  |  |
| Elections Disputes Dummy                         | A measure of electoral disputes. The measure has 1 if there was an       | World Bank (Development Indicators)      |  |  |  |  |  |  |
|  | electoral dispute within a given five-year period, and 0 otherwise.      |  |  |  |  |  |  |  |
|  | c. Control variables   |  |  |  |  |  |  |  |
| Variable   | Description  | Source of data                           |  |  |  |  |  |  |
| Labor Force (Total)                              | "The labor force comprises people ages 15 and older who supply labor     | World Bank (Development Indicators)      |  |  |  |  |  |  |
|  | for the production of goods and services during a specified period"      |  |  |  |  |  |  |  |
|  | (World Bank, 2022)   |  |  |  |  |  |  |  |
|  | The study takes natural logs for the variable.                           |  |  |  |  |  |  |  |
| Trade (% of GDP)                                 | "Trade is the sum of exports and imports of goods and services           | World Bank (Development Indicators)      |  |  |  |  |  |  |
|  | measured as a share of gross domestic product" (World Bank, 2022)        |  |  |  |  |  |  |  |
| FDI (% GDP)                                      | "The net inflows of investment to acquire a lasting management           | World Bank (Development Indicators)      |  |  |  |  |  |  |
|  | interest (10 percent or more of voting stock) in an enterprise operating |  |  |  |  |  |  |  |
|  | in an economy other than that of the investor". World Bank, 2022         |  |  |  |  |  |  |  |
| GFC (% GDP)                                      | "Average annual growth of gross fixed capital formation based on         | World Bank (Development Indicators)      |  |  |  |  |  |  |
|  | constant local currency. Includes land improvements, plant,              |  |  |  |  |  |  |  |
|  | machinery, and equipment purchases; and construction projects"           |  |  |  |  |  |  |  |
|  | (World Bank, 2022)   |  |  |  |  |  |  |  |

#### 4.1 Choice of variables and justification

# 4.1.1 Measure of economic growth - Real Gross Domestic Product Growth (RGDP)

Gross domestic product refers to the final total amount of goods and services produced in a country in a year, (Todaro & Smith, 2012). Increases in real GDP from year one to year two mean that an economy is growing. According to Nafziger (2006), economic growth refers to increases in the productivity levels of a country and its per capita income. Economic growth signals an increase in total production, i.e., the total amount of goods and services. Real GDP, taking natural logarithms will be used as a measure of economic growth in this study. The measure has been used in various empirical research involving economic growth (See Acemoglu et al., 2001; Tran et al., 2021; United Nations, 2021). Hence it is reasonable to use the variable to measure economic growth.

#### 4.1.2 Governance indicators

The World Bank's six governance indicators were constructed by Kaufmann, et al. (2002) based on subjective data collected from various sources which include cross-country surveys of various private, public and international organisations. The six indicators are normally distributed, running from -2.5 to 2.5 in standard deviation units. Lower scores denote poor while high scores denote good governance. This study will use two of the indicators as explained below.

# Rule of Law (RL)

Rule of law captures the degree to which citizens are confident in and adhere to the country's laws, especially contract enforcement, the courts, the police, and the possibility of violence and crimes (Kraay, et al., 2010). As empirical studies have shown, quality contract enforcement and the existence of property rights, which are born out of rule of law, both create

a conducive environment for investment. Studies by Morita and Zaelke (2007) and Dam (2006) confirm a positive link between economic growth and rule of law, therefore it makes sense to include the variable in this study as well. The variable is expected to be positively related to economic growth.

# Political stability & absence of violence and terrorism (PSAVT)

PSAV measures the possibility of a government being removed from power by violent or some unconstitutional means, this includes terrorism and political violence (Kraay, et al., 2010). As Collier (2009) notes, SSA is characterized by numerous coups and there is still a likelihood of them occurring in the future. In general, there have been numerous cases of disputed elections in SSA, as shown in the background of this paper. Cases of election disputes may lead to politically motivated violence, demonstrations, or civil unrest in general. It is therefore important to include this variable in the study. Studies by Feng (1997) and Alesina et al. (1996) used the same variable.

# 4.1.3 Other variables

#### **Foreign Direct Investment (FDI)**

The World Bank (2022) defines FDI as "the net inflows of investment to acquire a lasting management interest (10 percent or more of voting stock) in an enterprise operating in an economy other than that of the investor". This study will use the FDI net inflows (% of GDP). The variable has been widely used in other studies, including Ahmad (1999) and Wu and Lin (2015). FDI is anticipated to have a positive relationship with economic growth.

#### **Labor Force (Total)**

The Solow Growth model shows how labor force and capital accumulation affect longrun economic growth. Various studies have used the variable and it was found to be significant and positively impacting economic growth (see Miller & Upadhyay, 2002; Ha, 2016; Di Vita, 2017; Ngo & Nguyen, 2020). The *a priori* expectation is that the variable positively affects economic growth.

# Trade (% of GDP)

Trade shows the extent of an economy's openness. The variable has been used in various studies and it was found to be statistically significant and to have a positive effect on economic progress (see Loko & Diouf, 2009; Siddiqui & Ahmed, 2013). The *a priori* expectation is that the variable is positively related to economic growth.

# **Gross Fixed Capital Formation (% GDP)**

Gross fixed capital formation, being a major element of domestic investment, is expected to positively impact economic growth. Various scholars have used the variable (see Miller & Upadhyay, 2002; Loko & Diouf, 2009; Law et al., 2013; Meyer & Sanusi, 2019).

# 4.1.4 Democracy

Democracy is measured using the Polity IV index which is provided by the Center for Systematic Peace. This index varies from -10 to 10, representing entirely autocratic (inherited monarchy) to well-functioning democracies respectively. Countries that have scores that are below -5 are regarded as autocracies. This dataset is unique in that it tries to examine democratic and autocratic institutions of democracy concomitantly unlike other mutually exclusive and discrete forms of governance. The variable has also been used by other scholars (see Mansfield et al., 2000; Gerring et al., 2005; Thyne & Powell, 2014). This variable is expected to either positively or negatively affect economic growth.

# **Electoral disputes dummy**

A dummy variable has been constructed as an indicator of electoral disputes. This research is using data taken at five-year intervals (1996, 2001, 2006, 2011, and 2016). Therefore, if a country had an incidence of electoral dispute in the five-year period preceding these given years, it is given 1, and 0 otherwise. There are only two exceptions to this, i.e., Uganda and Chad, as they coincidentally held elections in exactly these given years. Therefore, if during that particular year, there was an electoral dispute, it will be given a 1 and then 0 otherwise. It is expected that the variable will negatively affect economic growth.

# 4.2 Methodology

The ordinary least squares (OLS) regression approach will be adopted in this study, using panel data to examine cross-sectional units (in this case countries) over time (i.e., 1996 to 2016). The panel data approach was chosen over pure time series or cross-sectional approaches because of the numerous strengths that it has. The panel data methodology admits that countries are not homogenous unless the homogeneity has been tested and proven; therefore, the approach controls for heterogeneity within cross-sectional units. Countries are certainly different in several aspects such as institutional quality, per capita income levels, FDI levels, etc. In other words, they all have unique individual-specific characteristics; the panel data method accounts for all these country-fixed effects.

According to Hsiao (1986), panel data is defined as a dataset that follows a given sample of cross-sectional units over a given period of time, and so provides multiple observations for each unit of the sample. It can also be defined as "repeated observations on the same cross-section, of individuals or firms in microeconomics applications observed for several periods" Cameron and Trivedi (2005, p. 12). Gujarati (2004) claims that panel data is more advantageous and dependable than other data types because it combines the merits of both cross-sectional and time-series data types. Furthermore, panel data variables are argued to have

less collinearity and more degrees of freedom. Most of the problems in pure time-series and cross-section data are addressed in panel data by the fixed-effects and random-effects tests (Hsiao, 1986; Gujarati, 2004). These arguments are reinforced by Kennedy (1998) who asserts that panel data is superior to other estimation techniques because it is more reliable, more informative, gives less collinearity, and offers more degrees of freedom, which improves reliability.

Pure cross-section instrumental variable regressions have high chances of producing spurious regressions by producing biased coefficients, which is not the case with panel data as it takes into account some important factors that cannot be measured, for instance, unobservable country-specific effects (Islam, 1995). To sum up the merits of panel data, Cameron and Trivedi (2005) argue that it increases the precision of estimations due to the increase in the number of observations, which is a result of combining several periods for different individual units (see also Baltagi, 2005).

There are two approaches when applying this methodology, i.e., the dynamic and the static panel data models. The major difference between the two models is that the former includes the lagged dependent variable, which is excluded in the latter. This research uses the dynamic model.

# 4.2.1 Estimation techniques and model specifications

# 4.2.1.1 Model 1: The Dynamic Panel Data Approach

In determining the impact of political institutions and democracy on economic growth, this study makes use of panel data standard regression models, namely, Fixed-effects Model (FEM), and Random-effects Model (REM). The Hausman test is carried out to determine which of the three models is the most appropriate estimation procedure. The model to be estimated is thus stated as:

$$Y_{it} = \alpha_{it} + \beta_1 PSAVT_{it} + \beta_2 RL_{it} + \beta_3 FDI_{it} + \beta_4 TLF_{it} + \beta_5 TRD_{it} + \beta_6 GFC_{it} + \beta_7 DEM_{it} + \beta_8 ED_{it} + \varphi_i + \eta_t + \varepsilon_{it}$$

Where:

*i* represents the *ith* country and *t* represents the time period; and  $i = 1 \dots N$  and  $t = 1996, 2001, 2006, 2011, 2016, and the <math>\beta$ s are the coefficients to be estimated;

 $Y_{it}$  = Real GDP (log)

 $\alpha_{it}$  = the intercept;

 $PSAVT_{it}$  = Political stability and absence of violence and terrorism, a measure of political institutions;

 $RL_{it}$  = Rule of law;

 $FDI_{it}$  = Foreign Direct Investment (%GDP)

 $TLF_{it}$  = Total labour force (log);

 $TRD_{it}$  = Trade (% of GDP) (log);

 $GFC_{it}$  = Gross fixed capital formation;

 $DEM_{it} = Democracy;$ 

 $EV_{it}$  = A dummy variable for electoral disputes;

 $\varphi_i$  = Country fixed-effects;

 $\eta_t$  = Time fixed-effects;

 $\varepsilon_{it}$  = the error term.

# 4.2.1.2 Model 2: The Panel Granger Causality Approach

To investigate the direction of causality between political institutions and economic growth, I will employ the panel Granger causality method (Dumitrescu & Hurlin, 2012), which is an extension of the original time-series Granger causality test (Granger, 1969). However, the new approach takes into account cross-sectional heterogeneity. The VAR analysis will be

applied. The estimation equation for the causality test for the heterogeneous panels is specified as below:

$$Y_{i,t} = a_i + \sum_{k=1}^{p} Y_{i,t-k}^k + \sum_{k=1}^{p} \beta_i^k X_{i,t-k} + \varepsilon_{i,t}$$
 (i)

Where X and Y are stationary variables for t=1, ... T periods and i=1, ... N units;  $a_i$  are individual fixed effects, p is an identical lag length for all units;  $\varepsilon$  is the error term. The test is done under the null hypothesis:  $H_0: \beta_i^k = 0 \quad \forall i=1,...,N$ , which assumes that no causal relationship exists from X to Y in all cross-sectional units. The alternative hypothesis is  $H_1: \beta_i^k \neq 0 \quad \exists \quad (i,k)$ , thus, it follows that if the test statistic is insignificant, then X is not causing Y for all individual units. Therefore, if  $H_0$ , is not accepted, then a causal relationship exists for at least one of the countries.

To test for causality from political institutions to economic growth and vice versa, the following specifications are used:

$$rGDPC_{i,t} = a_i + \sum_{k=1}^{p} Y_i^k GDPC_{i,t-k} + \sum_{k=1}^{p} \beta_i^k X_i Inst_{i,t-k} + \varepsilon_{i,t} \quad (ii)$$

$$Inst_{i,t} = a_i + \sum_{k=1}^p Y_i^k Ins_{i,t-k} + \sum_{k=1}^p \beta_i^k X_i GDPC_{i,t-k} + \varepsilon_{i,t} \quad (iii)$$

Where *rGDP* is the log real GDP and *Ins* represents political institutions, measured by *PSAVT*. Equations (ii) and (iii) allow an exploration of the relationships over different time lags, in this case four lags, and the lag length is determined by the Akaike information criteria (AIC) (U.N, 2021). The strength of this approach is that it controls for heterogeneity which leads to better estimates as compared to other methods such as the Generalised Method of Moments (GMM), which can lead to inconsistent estimates if coefficients are not homogenous.

# **Model Specification Tests**

#### **The Random Effects Test**

This model assumes that the intercept of each cross-sectional unit is randomly drawn from a large population which has a mean value that is constant. It goes on to express the individual intercept as a deviation from the constant mean, Gujarati (2004). Unlike the FEM, the REM is economical in terms of its degrees of freedom.

#### The Fixed Effects Test

The FEM is used when the errors are assumed to be fixed. The model allows the intercept of the regression model to differ among the different individual units because each cross-sectional unit may have its own special characteristics (Gujarati, 2004). The test is therefore used to for comparison of the FEM with the REM.

# The Hausman specification test

After the data has been taken through the FEM and REM testing techniques, the Hausman test shall then be carried out to determine whether to rely on the random effects or fixed effects model in interpreting regression results. This test works in detecting endogenous regressors in a model. In choosing the best regression method, the Hausman test helps in figuring out if predictor variables are endogenous. The null hypothesis is that the REM will be efficient and consistent versus the alternative hypothesis that the FEM would be efficient and consistent:

 $H_0$ : Cor  $(\alpha i, Xit = 0)$  (RE is consistent and efficient)

 $H_1$ : Cor  $(\alpha i, Xit \neq 0)$  (FE is consistent and efficient)

If the P-value (Prob. > Chi2) is greater than 5% i.e. (Pro>Chi2) > 0.05, accept the null hypothesis that the REM is consistent. Hence the regression results from the random effects test will be used or otherwise.

# **Multicollinearity Tests**

According to Gujarati (2004), multicollinearity exists when there is a perfect linear association between any two independent variables such that it becomes impossible to isolate the effect of one independent variable on the dependent variable from the effects of another one. A correlation matrix is used to looks at these relationships. Any correlation coefficient that is greater than 0.8 is not acceptable. Therefore, one of the two explanatory variables where such an association exists must be dropped.

# **Panel Granger Unit-root test**

Since this study is applying the VAR analysis, the panel data series are required to be stationary as a pre-condition. If the data contains unit roots, it will produce spurious regressions. The study will therefore use the Augmented Dickey-Fuller (ADF) test for unit roots. The hypotheses are:

 $H_0$ : Panels contain a unit root

 $H_1$ : Panels do not contain a unit root

The decision rule is that if the p-value  $< \alpha$ , the null hypothesis is not accepted but if the p-value  $> \alpha$ , we accept the null hypothesis.

# **Residuals Normality Test**

This is a test for detecting if the data to be used in regression analysis does not violet the assumption of normality. There is a need to test the extent to which data deviates from normality and whether such a deviation has statistical significance. Skewness and kurtosis tests will be relied upon in this study to tests for normality, using the Pesaran's test of cross-independence

# **Stationarity tests**

The study employs the Hadri Lagrange Multiplier Stationarity test to explore if there is a presence of unit roots in all the variables. The null hypothesis is that panels are stationary, versus an alternative hypothesis that panels contain a unit root.

#### **CHAPTER 5**

# RESULTS PRESENTATION, INTERPRETATION AND DISCUSSION

# **5.0 Descriptive statistics**

Table 3 presents the summary statistics of the independent and dependent variables used in this research. The summary statistics show the mean, standard deviation, minimum and maximum values of the variables. The total number of observations for all variables is 155 observations and cross-sectional units, making it a balanced panel dataset.

**Table 4:** Summary Statistics

| Variable           | Mean     | Standard<br>Deviation | Minimum<br>Value | Maximum value | Observations |
|--------------------|----------|-----------------------|------------------|---------------|--------------|
| Log real GDP       | 23.20912 | 1.344457              | 20.37926         | 26.89482      | 155          |
| Democracy          | 1.696774 | 5.038004              | -9               | 10            | 155          |
| Electoral disputes | .3870968 | .488665               | 0                | 1             | 155          |
| PSAVT              | 59476    | 0.91883498            | -2.681914        | 1.088935      | 155          |
| Rule of law        | 6977697  | .6440137              | -1.905428        | .9823496      | 155          |
| FDI (%GDP)         | 3.067196 | 4.848452              | -5.007209        | 26.87951      | 155          |
| GFC (% GDP)        | 2.972299 | 0.4071505             | 0.7996141        | 3.959256      | 155          |
| Log trade          | 4.031918 | 0.5347002             | 0.3756851        | 5.049676      | 155          |
| Log labour force   | 15.29655 | 1.328585              | 12.5154          | 17.86322      | 155          |

Note. Author's calculation using Stata

# **5.1** Diagnosis tests results

Various diagnostic tests have been carried out to ensure that the estimations from the regressions do not produce some spurious results. This section presents the diagnostic tests results. All the tests have shown that the data is free from any potential sources of bias, hence the regressions done have produced reliable and unbiased estimates.

# **5.1.1** Multicollinearity test results

The results in table 4 show that there is no multicollinearity as none of the variables are seriously correlated, i.e., none of them has a correlation coefficient greater than 0.8.

Table 5: Multicollinearity test correlation matrix

| Variables             | (1)    | (2)    | (3)    | (4)    | (5)    | (6)   | (7)   | (8)   |
|-----------------------|--------|--------|--------|--------|--------|-------|-------|-------|
| (1) psavt             | 1.000  |        |        |        |        |       |       |       |
| <b>(2)</b> fdi        | -0.011 | 1.000  |        |        |        |       |       |       |
| (3) democracy         | 0.322  | 0.080  | 1.000  |        |        |       |       |       |
| (4) electoraldisputes | -0.144 | 0.108  | -0.129 | 1.000  |        |       |       |       |
| (5) llaborforcetotal  | -0.465 | 0.027  | -0.045 | 0.250  | 1.000  |       |       |       |
| (6) gfcgdp            | 0.073  | 0.351  | 0.052  | 0.029  | 0.114  | 1.000 |       |       |
| (7) ruleoflaw         | 0.681  | -0.004 | 0.522  | -0.335 | -0.356 | 0.189 | 1.000 |       |
| (8) ltradeofgdp       | 0.430  | 0.247  | 0.174  | 0.002  | -0.458 | 0.188 | 0.313 | 1.000 |
|                       |        |        |        |        |        |       |       |       |

Note. Author's calculation using Stata

# 5.1.2 Residuals normality test results

The normality test results show that the residuals are normally distributed.

Skewness/Kurtosis tests for Normality

----- joint -----

| Variable    | Obs. | Pr. (Skewness) | Pr. (Kurtosis) | adj_chi2(2) | Prob>chi2 |
|-------------|------|----------------|----------------|-------------|-----------|
| residuals 1 | 155  | 0.001          | 0.960          | 9.530       | 0.009     |

# **5.1.3 Stationarity test results**

The Hadri-Lagrange Multiplier Stationarity test was conducted to explore if there is a presence of unit roots in the variables. The results of the test show that all variable employed in the study are stationary at their levels. This means that there is no cointegration among the included variables in the study. It follows that the data can be relied upon for interpretation and for making inferences.

#### 5.1.4 Hausman test results

According to the results of the Hausman test, the p-value = 0.0000, which is less than 0.05, therefore, we fail to accept the null hypothesis that the random effects model is efficient and consistent. The fixed-effects model is therefore chosen as the most appropriate for this analysis. The full results are in appendix 4.

# Hausman (1978) specification test

Test:  $H_0$ : difference in coefficients not systematic  $Chi2 (8) = (b-B) ' [(V_b-V_B) ' (-1)] (b-B)$ = 65.07Prob>chi2 = 0.0000

# **5.1.5** Panel Granger Unit-root test results

Table 5 contains the results for the ADF test for panel roots. The test was conducted at levels for the measures of institutions and the dependent variables only, since they are the only necessary variables for the causality research question. The results show that the test rejects  $H_0$  and accepts  $H_1$ , meaning the absence of unit root in at least one of the countries in the sample.

**Table 6: Panel Granger Unit-root test results** 

|                        | Augmented-Dickey Fuller Test |            |  |  |  |
|------------------------|------------------------------|------------|--|--|--|
|                        | Without Trend                | With Trend |  |  |  |
| Level                  |                              |            |  |  |  |
| GDP pe Capita (log)    | -5.39***                     | 1.54*      |  |  |  |
| Political Institutions | -7.52***                     | -5.48**    |  |  |  |
| Rule of Law            | -4.56***                     | -3.72***   |  |  |  |

*Note.* \* 10% significance level, \*\* 5% significance level, \* 1% significance level

# **5.2 Standard Panel Data Regression Results**

The main regressions for this study were done following the fixed-effects and random-effects models with panel data. Table 6 shows the results. Log real GDP was used as the dependent variable to explain economic growth in Africa. Column 1 shows the results from the fixed-effects model while column 2 shows results from the random effects model. P-values, which indicate significance of the variables, are shown in parenthesis while standard errors are shown in brackets. The full results for the two models are shown in Appendices 2 and 3.

**Table 7:** Main regression results for model 1

|                    | Dependent variable: Log real GD |                               |
|--------------------|---------------------------------|-------------------------------|
|                    | (1)                             | (2)                           |
|                    | Fixed-effects model             | Random-effects model          |
| Democracy          | 0125009                         | 0064234                       |
|                    | (0.029) **                      | (0.287)                       |
|                    | [.0056607]                      | [.0060309]                    |
| Electoral disputes | .0033974                        | .0246243                      |
|                    | (0.915)                         | (0.477)                       |
|                    | [.0319298]                      | [.0346462]                    |
| PSAVT              | 0457003                         | 0541775                       |
|                    | (0.061) *                       | (0.039) **                    |
|                    | [.024159]                       | [.0263124]                    |
| Rule of law        | .2553305                        | .3381839                      |
|                    | (0.000) ***                     | (0.000) ***                   |
|                    | [.0710519]                      | [.0751998]                    |
| FDI (%GDP)         | .0073736                        | .0072717                      |
|                    | (0.024) **                      | (0.039) **                    |
|                    | [.0032314]                      | [.0035278]                    |
| GFC (% GDP)        | .0036578                        | .0054583                      |
|                    | (0.164)                         | (0.054) *                     |
|                    | [.0026128]                      | [.0028304]                    |
| Log trade (% GDP)  | .1301804                        | .1411905                      |
|                    | (0.002) ***                     | (0.002) ***                   |
|                    | [.04104]                        | [.0446741]                    |
| Log labour force   | 1.654495                        | 1.410424                      |
| -                  | (0.000) ***                     | (0.000) ***                   |
|                    | [.0810769]                      | [.075644]                     |
|                    | $R^2$ within = 0.8592           | $R^2 \text{ within} = 0.8523$ |
|                    | between = 0.5064                | between $= 0.5167$            |
|                    | overall = 0.5121                | overall = $0.5243$            |

Note. P-values are in parentheses while standard errors are in brackets. Significance is shown as \*\*\* p<.01, \*\* p<.05, \* p<.10.

# **5.2.1 Discussion of Results**

The results for the fixed-effects model are going to be used in this analysis because, according to the Hausman test, FEM was the most appropriate model to use. The F-test of the FEM, Prob > F = 0.0000, is giving us a 99% confidence interval (*see appendix 2*). This implies that the model is correctly specified.

The coefficient for democracy is negative meaning that the level of democratization that currently exist in Africa has a harmful effect on economic performance. This coefficient

is significant at the 5% level meaning that democracy is important in explaining economic growth in Africa. For every 1 unit decline in the level of democracy, economic growth falls by about 1.24%. Gerring et al. (2005) argue that the net effect of democracy on growth is not clear as economies can grow under either democratic or authoritarian regimes. However, another strand of literature has empirically proven that democracy maters for growth (e.g., Acemoglu et al, 2019). Literature is replete with evidence that the level of democratization in Africa is very low as most of the governments are classified as autocratic regimes. That being the case, it is plausible to conclude that the governments in Africa, most of which are autocratic regimes, are harming economic growth. The null hypothesis of the research which stated that low levels of democratization negatively affect economic growth cannot be rejected.

The endemic electoral disputes in Africa have been one of the motivation factors to carry out this study. A dummy variable was constructed to capture electoral disputes. It is worth noting that electoral disputes are not significant in explaining economic growth in this study. This result may not absolutely mean that electoral disputes are not significant at all, but maybe the sample of countries included and the time frame being covered by the study may need to be adjusted to get significant results. The methodology may as well be changed. This is therefore a key area for further study. Another way we can look at it is to say that the underlying political instability is a true root of underdevelopment and electoral disputes simply reflect the fundamental problems on the surface

Political institutions are measured by the variable political stability and absence of violence and terrorism. The variable is statistically significant at the 10% level. A 1 unit increase in political instability harms economic growth by approximately 4.5%. The negative coefficient exhibited by the variable means that the nature of political institutions in Africa is detrimental to growth. The descriptive statistics for the variable show a mean of -0.595, where the scores are normally distributed from -2.5 to 2.5. This implies that on average, there is

political instability, violence and terrorism in the continent. This is supported by the widespread coups, Islamic insurgencies (e.g., in some parts of Nigeria, Mozambique, and other states) and political upheavals that are witnessed across the length and breadth of the continent.

The importance of rule of law in contemporary development of nations cannot be overemphasized. The variable rule of law was included in this research as part of the institutional variables, specifically to proxy legal institutions. Rule of law has a positively affects economic growth, precisely, in this case, for a unit increase in the rule of law, economic growth increases by about 29%. This possibly means that with rule of law, economic agents have confidence in the economy as contract enforcement, property rights, and the country's laws are respected. This has potential to attract FDI and promote domestic investments which leads to economic success. The variable is significant at 1%, which makes it one of the highly significant explanatory variables within this model.

FDI (% GDP) was used to measure foreign direct investment inflows into a country. As shown in the previous chapter, this variable has been empirically proven to impact economic growth positively. In this study, FDI is significant in explaining economic growth at the 5% level of significance. The variable exhibits a positive sign, which meets the *a priori expectations* made in the previous chapter. A 1 unit increase in FDI inflows improves economic performance by 0.74%. This is in line with the findings of other scholars, e.g., Wu and Lin (2015).

Another variable that impacts economic growth positively is trade. The results show that trade (%GDP) has a positive coefficient, and it is significant at the 1% level. For every 1 unit increase in trade, there will be a correspondent 0.13% improvement in economic performance. The results confirm those of Siddiqui and Ahmed (2013) and Ngo & Nguyen (2020) who find a positive impact between trade and economic growth.

Lastly, total labour force is a significant variable in explaining economic growth in our model. It is significant at the 1% level. The variable exhibits a positive coefficient which means it has a positive effect on economic growth. The higher a country's labour force, the faster the rate of economic growth. A 1 unit rise in the size of the labor force induces an approximately 1.65% improvement in the performance of the economy.

# **5.4 Panel Granger Causality Results**

The results for the panel granger causality regression are shown in Table 8 based on the full sample of 32 countries in the research. In Panel A, causality is running from political institutions to economic growth while in Panel B the results show that causality runs from economic growth to political institutions. In carrying out this test, the Akaike Information Criterion (AIC) was used to determine the lag length and 1 lag was chosen by the researcher. The significant point estimates in the results are marked by an asterisk. These points imply that political institutions support economic growth in at least one country from the sample.

**Table 8: Panel Granger Causality Results** 

|              | Panel A: Political institutions — Economic Growth                 |
|--------------|---|
|              | Real GDP (log)  |
| Political    | 2.61***   |
| Institutions |   |
|              |   |
|              | Panel B: Economic Growth → Political institutions                 |
|              | Panel B: Economic Growth → Political institutions  Real GDP (log) |
| Political    |   |

**Note.** The AIC was used to determine the number of lags, the maximum number being 4 lags. \* Shows statistical significance at 10%, \*\* 5% confidence and \*\*\*1% significance levels.

The results obtained show that there is a one-directional relationship running from good political institutions to economic growth. Additionally, the statistical significance for the causality is very strong, with a 99% confidence interval. The causality from economic growth to institutions is insignificant implying that in developing countries, economic growth does not result in good institutional quality. This probably means that in low-income countries, the

economic growth levels attained lack the capacity to influence institutional quality. The results of this study are in line with the findings of Chong and Calderon (2000), Lee and Kim (2009), Law et al., (2013) who find a unidirectional causation running from institutions to economic growth. The null hypothesis that there is a bi-directional relationship between political institutions and economic growth is therefore rejected, and the alternative hypothesis that there is a unidirectional relationship is accepted. These results are in harmony with those in model 1 which show that political institutions affect economic growth.

#### **CHAPTER 6**

#### CONCLUSION AND POLICY RECOMMENDATIONS

# 6.0 Summary and conclusions

This study sought to investigate the nexus between economic growth and political institutions, with a specific motivation for electoral disputes and democracy. Africa, especially the sub-Saharan region has suffered from economic stagnation for many decades despite rapid economic transformation in other parts of the world. Whilst scholars have come up with different theories and explanations of factors that impede or enable growth, institutions have been among the leading factors that have been cited as determinants of economic growth, following the pioneering work of Douglas North. So, the question is, could the economic failure of Sub-Saharan Africa be as a result of poor institutional quality?

Furthermore, countries in the African continent have been grappling with a seemingly unstoppable wave of election disputes in the past few decades. It seems most governments and election management bodies in Africa cannot run free, fair, credible, and transparent elections. Allegations of election rigging, voters' roll manipulation, violence, intimidation of opposition party supporters, chaotic vote counting, and collation of results are all rampant within the continent. For the purposes of this research, an electoral dispute is defined as an argument or confrontation between two or more parties that emanates from alleged fraud or manipulation of the process or the outcome of an election. An electoral dispute can be grand i.e., involving physical clashes between the supporters of any two presidential candidates, escalation of the matter to the courts of law, or be marked by post-electoral violence which often results in loss of life. It can also be petty i.e.; a losing candidate may just make sensational claims that the elections were marked by some irregularities but their claim lacks substance and no further

consequences erupt from such a claim. Grand forms of electoral disputes are the focus of this research.

The objectives of the paper were to [1] Empirically examine how electoral disputes affect economic growth; [2] Assess the direction of causality between political institutions and economic growth; and [3] Investigate whether democracy affects economic growth. It has been shown that institutions (political and legal), democracy, trade, FDI inflows, and labor force are significant in explaining economic growth in the African continent. While the study hypothesized that electoral disputes harm economic growth prospects, there is no empirical evidence to support that claim as electoral disputes do not have a significant impact on economic performance. However, it should be noted that the fact that the variable is insignificant cannot be taken to mean that electoral disputes have no effect on economic performance. Perhaps there is need to increase the sample size and the time frame and to change the methodology used for the estimation. As shown by available statistics, electoral disputes are too rampant in Africa, which brings into scrutiny the political institutions, democratization and the rule of law within the continent.

Low levels of democracy are found to impede economic performance. Since most African governments are rated as autocratic, it is not surprising that on average, the level of democratization is still very low. Perhaps, Africa has not yet matured democratically to reach the levels of developed, first world countries. No reverse causality was found to exist between political institutions and economic growth; there is a unidirectional causality running from political institutions to economic performance. This implies that the nature of the political institutions in the continent is not a result of the levels of economic performance but the opposite is true.

#### **6.1 Policy recommendations**

Given aforementioned findings, it is advantageous for governments in Africa to commit resources towards building institutions. As a starting point, it is imperative for governments to set up the right fundamentals for political stability to prevail. This would include avoidance of hate speech and confrontational politics, and creating an environment of tolerance to divergent political views, opinions and affiliation. Once this is done, the possibility of violence and terrorism is minimized, or even eliminated, which leads to political stability, which in turn promotes economic progress.

Given the fact that political institutions do not operate in a silo but within a complete institutional ecosystem, I recommend governments to uphold and guarantee the quality of other institutions such as the rule of law, government effectiveness, property rights, control of corruption, etc. As shown in this research, rule of law is significant in explaining economic growth in Sub-Saharan Africa.

Additionally, it is prudent to involve different players in building and sustaining good institutions. It should not be entirely the role of political leaders to achieve this agenda, this is because most leaders in autocratic states or in countries with extractive institutions, tend to maintain the status quo so that they continue benefiting from poor institutions. It is therefore important to involve the generality of the population, say through consultations and referendums, and other fora.

To global development partners such as the IMF and World Bank, I recommend that they set stringent conditions for lending to developing countries, for instance, receipt of aid or lending should be contingent upon how much a country improves its institutions and democracy. The only exception should be with humanitarian aid. Those whose ratings fail to improve should ultimately fail to access lines of credit and aid. Better institutions also

guarantee accountability and transparency in the use of aid funds; hence, this will also be in the best interest of the development partners.

Furthermore, there is need to embrace democracy in order to guarantee economic prosperity. In fact, democracy and good political institutions are two different sides of the same token. By pursuing better institutional reforms, governments in Africa will be also consolidating democratic gains. By and large, the level of democracy determines the nature of a regime in a country, which in turn determines the political institutions, which ultimately determine the nature of economic institutions.

Lastly, other variables such as labor force, FDI and trade are also important in driving economic growth. I therefore recommend governments in Africa to try as much as possible to ensure that they put in place policies that attract FDI inflows, encourage more openness of their economies and manage population growth to ensure a sufficient labor force all the time.

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Appendix 1: List of countries in the study

| Angola                     | Madagascar   |
|----------------------------|--------------|
| Botswana                   | Malawi       |
| Burkina Faso               | Mali         |
| Burundi                    | Mauritius    |
| Cameroon                   | Mozambique   |
| Chad                       | Namibia      |
| Congo, Democratic Republic | Niger        |
| Cote de' voire             | Nigeria      |
| Eswatini                   | Rwanda       |
| Ethiopia                   | South Africa |
| Gabon                      | Sudan        |
| Guinea                     | Tanzania     |
| Guinea Bissau              | Togo         |
| Kenya                      | Uganda       |
| Lesotho                    | Zambia       |
| Zimbabwe                   |              |

**Appendix 2: Fixed-Effects Model Regression Results** 

| lrealgdp           | Coef.  | St.Err.  | t-value  | p-value     | [95% Conf | Interval] | Sig |
|--------------------|--------|----------|----------|-------------|-----------|-----------|-----|
| electoraldisputes  | .003   | .032     | 0.11     | .915        | 06        | .067      |     |
| democracy          | 013    | .006     | -2.21    | .029        | 024       | 001       | **  |
| psavt              | 046    | .024     | -1.89    | .061        | 094       | .002      | *   |
| Îtradeofgdp        | .13    | .041     | 3.17     | .002        | .049      | .211      | *** |
| gfcgdp             | .004   | .003     | 1.40     | .164        | 002       | .009      |     |
| llaborforcetotal   | 1.654  | .081     | 20.41    | 0           | 1.494     | 1.815     | *** |
| fdi                | .007   | .003     | -2.28    | .024        | 014       | 001       | **  |
| ruleoflaw          | .255   | .071     | 3.59     | 0           | .115      | .396      | *** |
| Constant           | -2.506 | 1.245    | -2.01    | .047        | -4.972    | 039       | **  |
| Mean dependent var |        | 23.209   | SD deper | ident var   |           | 1.344     |     |
| R-squared          |        | 0.859    | Number ( | of obs.     |           | 155       |     |
| F-test             |        | 88.491   | Prob > F |             |           | 0.000     |     |
| Akaike crit. (AIC) |        | -177.476 | Bayesian | crit. (BIC) |           | -150.086  |     |

<sup>\*\*\*</sup> p<.01, \*\* p<.05, \* p<.1

**Appendix 3: Random Effects Regression Results** 

| lrealgdp           | Coef. | St.Err. | t-value   | p-value   | [95% Conf | Interval] | Sig |
|--------------------|-------|---------|-----------|-----------|-----------|-----------|-----|
| electoraldisputes  | .025  | .035    | 0.71      | .477      | 043       | .093      |     |
| democracy          | 006   | .006    | -1.07     | .287      | 018       | .005      |     |
| psavt              | 054   | .026    | -2.06     | .039      | 106       | 003       | **  |
| Îtradeofgdp        | .141  | .045    | 3.16      | .002      | .054      | .229      | *** |
| gfcgdp             | .005  | .003    | 1.93      | .054      | 0         | .011      | *   |
| llaborforcetotal   | 1.41  | .076    | 18.65     | 0         | 1.262     | 1.559     | *** |
| fdi                | .007  | .004    | -2.06     | .039      | 014       | 0         | **  |
| ruleoflaw          | .338  | .075    | 4.50      | 0         | .191      | .486      | *** |
| Constant           | 1.18  | 1.184   | 1.00      | .319      | -1.141    | 3.501     |     |
| Mean dependent var |       | 23.209  | SD deper  | ndent var |           | 1.344     |     |
| Overall r-squared  |       | 0.524   | Number    | of obs.   |           | 155       |     |
| Chi-square         |       | 588.841 | Prob > cl | ni2       |           | 0.000     |     |
| R-squared within   |       | 0.852   | R-squared | d between |           | 0.517     |     |

<sup>\*\*\*</sup> p<.01, \*\* p<.05, \* p<.1

# **Appendix 4: Hausman specification test**

. asdoc hausman fe re (File Myfile.doc already exists, option append was assumed)

|              | Coeffi   | cients —— |            |                     |
|--------------|----------|-----------|------------|---------------------|
|              | (b)      | (B)       | (b-B)      | sqrt(diag(V_b-V_B)) |
|              | fe       | re        | Difference | S.E.                |
| electorald~s | .0033974 | .0246243  | 0212269    |                     |
| democracy    | 0125009  | 0064234   | 0060775    |                     |
| psavt        | 0457003  | 0541775   | .0084773   |                     |
| ltradeofgdp  | .1301804 | .1411905  | 01101      |                     |
| gfcgdp       | .0036578 | .0054583  | 0018004    |                     |
| llaborforc~1 | 1.654495 | 1.410424  | .2440709   | .0291794            |
| fdi          | 0073736  | 0072717   | 0001019    | -                   |
| ruleoflaw    | .2553305 | .3381839  | 0828534    |                     |

b = consistent under Ho and Ha; obtained from xtreg B = inconsistent under Ha, efficient under Ho; obtained from xtreg

Test: Ho: difference in coefficients not systematic