MULTIPARTY DEMOCRACY, SOCIAL COHESION AND HUMAN DEVELOPMENT IN SUB-SAHARAN AFRICA

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A Dissertation Submitted in Partial Fulfillment of the Requirements for the Degree of Doctor of Philosophy (Development Administration) School of Public Administration National Institute of Development Administration 2022

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ABSTRACT

Title of Dissertation	MULTIPARTY DEMOCRACY, SOCIAL COHESION AND HUMAN DEVELOPMENT IN SUB-SAHARAN AFRICA
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The reintroduction of multiparty democracy in Sub-Saharan Africa during the early 90s and the persistent poor human development performance of the region have sparked several controversies regarding the need for such a political system in Africa. In the extant literature, these controversies have been characterized by fierce theoretical debates as to whether multiparty democracy influences human development. Until recently, the most commonly held view in this context has been that multiparty systems ameliorate human development and that, they were imperative for a country struggling with development. Lately however, that view has been fiercely challenged and debunked, with a multitudinous number of quantitative and qualitative studies conducted to corroborate the absence of a tangible correlation between multiparty democracy and various measures of human development across the world. On a different level all the while, other scholars seeking to push the debate a little further, have contended that social cohesion, rather than multiparty democracy, has the potential to ameliorate human development. The present dissertation examines these controversies along with the perception of Sub-Saharan African populations concerning the democratic transition and its effect on their well-being. A panel data analysis of 35 countries was conducted within the time spanning 1995 to 2019 to determine the effect of multiparty democracy, social cohesion, and their interaction on human development. Ordinary least squares (OLS), random effects (RE), fixed-effects (FE), and system generalized methods of moments (system-GMM) estimations were used to control for specific characteristics. The study found the following. First, multiparty democracy, which was measured by democracy scores, civil liberties, and political rights, has a positive but distal relationship with human development in sub-

Saharan Africa. Second, social cohesion, measured by the state fragility index, has a positive but long-term effect on human development. Third, the interaction between multiparty democracy and social cohesion has a positive long-term effect on human development. Another significant finding of this study was that social cohesion decreases the negative influence of multiparty democracy on human development in Sub-Saharan Africa. Thus, multiparty democracy is likely to improve the well-being of the populations of sub-Saharan Africa if the degree of social cohesion is high. That also means that social cohesion is susceptible to dampening the negative effect of multiparty democracy on human development in the context of this study. As such, social cohesion is critical in terms of the extent to which multiparty democracy wields influence on human development outcomes in Sub-Saharan Africa. This is especially true in high cohesive societies where socioeconomic divisions are low and the institutions are inclusive and effective. Hence, citizens enjoy high public spending, a fair revenue share, and fewer disparities in the level of social solidarity. A number of policy recommendations are discussed in the present study towards the achievement of sustained human development in the Sub-Saharan African region.

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LIST OF ABBREVIATIONS

ARDL Auto Regressive Distributive Lag

BASW Basic Drinking Water

CL Civil Liberties

CO Coastal

DEMOC1 Freedom House Measure of Democracy

DEMOC2 Polity 5 Measure of Democracy

DEMOC1SC The Interaction Term Between Multiparty Democracy 1 and Social Cohesion

DEMOC2SC The Interaction Term Between Multiparty Democracy 2 and Social Cohesion

DRC Democratic Republic of Congo

ELT Ethno-Linguistic Fractionalization

FE Fixed-Effects

GDP Gross Domestic Products

GDPPC GDP per Capita

GE Government Effectiveness

GMM Generalized Methods of Moment

HDI Human Development Index

IMR Infant Mortality

IQ Institutional Quality

LEXP Life Expectancy

LR Literacy Rate

MMP Mixed Member Proportional Election System

NEDAP New Partnership for African Development

OECD Organization for Economic Cooperation and Development

OIR Over-Identification Restriction

OLS Ordinary Least Squares

PGR Population Growth

- PR Political Rights
- **PS** Political Stability
- **RE** Random Effects
- **RDS** Relation Developmental Systems
- SC Social Cohesion
- SCORE Social Cohesion and Reconciliation
- SSA Sub-Saharan Africa
- **UN** United Nations
- UNDESA United Nations Department of Economic and Social Affairs
- **UNDP** United Nations Development Program
- **UNPD** United Nations Population Division
- WHO World Health Organization
- WGI Worldwide Governance Indicators

CHAPTER 1

INTRODUCTION

1.1 Background

Sub-Saharan Africa, a region of forty-six countries according to the United Nations Development Program (UNDP) and with a combined population of over 1.1 billion inhabitants as of 2019 (Statista, 2020), has long been considered the least developed area in Africa and the world. The reasons of this hold back are believed to be dysfunctional political institutions and governance, recurring conflicts, rampant corruption, resource mismanagement, among other debilitating social concerns. In order to help the region develop, if that were the real intention, aid donors in the West (countries and institutions alike) decided to impose multiparty democracy on the whole region. Hence, to act out their decision, these groups have linked most parts of international assistance to political system change in Sub- Saharan Africa, claiming that, democracy (the new system) would reduce the scope of conflicts in the region and foster good governance which in turn would stimulate development (Chabal, 2002). However, the events of the past three decades in this region of Africa, conflict with such a narrative (Chabal, 2002). The new system (multiparty democracy) has a priori, neither led to social and political stability, nor better forms of governance, let alone development. On the contrary, some observers maintain that the very few times some Sub-Saharan Africa countries have come closer to good governance, socioeconomic and human development were without any contest before the inception of pluralistic democracy in the region earlier in the 90s. For instance, the peak in good governance and well-being in the Niger republic was said to have occurred in the 80s with the then president, General Seyni Kountche, a military leader and so far, the one considered the best president in the history of the country. In the Ghana republic, populations still have good memories of the tenure of former president John Jerry

Rowlings, another military ruler and great leader. In sum, multiparty democracy is believed by many to have failed to achieve its goals in Sub-Saharan Africa.

1.2 Problem Statement

The reintroduction of multiparty democracy in Sub-Saharan Africa during the early 90s and the persistent poor human development outcomes of the region, have sparked several controversies regarding the need for such a political system in Africa. Other forms of controversies have emerged on the continent as well. Among the most recurrent, one is concerned with the true intent of Western governments for pushing for democratic transitions in Sub-Saharan Africa, giving that a similar system had already collapsed after independence and turned most or all African countries into some variant of a "one-party state" (Alence, 2004). It is worth recalling here that independence in former French and British protectorates and colonies were followed by pluralist polls which sudden revived the dormant social divisions and animosity within the region. During this time, the authorities of these ancient colonies explained certain rationales regarding this sudden transition to a one-party system, stressing the peril of electoral competition. Those very rationales have been deemed today merely as alibis used to circumvent democratic transitions in Africa since the underpinning logic of these explanations remain as valid now as it was at independence (Chabal, 2002).

Regardless of the intentions underlying the push for the change in the political system, the multiparty democracy in SSA is yet to trigger sound political development from monopartism or monopoly to pluralism and perfect competition. In most African countries, as indicated by Chabal (2002), those who vie for political power belong to a small group of politicians who have been "in the business" for ages. Moreover, in numerous instances, the sitting ruler has arranged to cling to power via manipulation, authoritarianism, and persuasion (Alence, 2004; Chabal, 2002). In short, the new political system (or democracy, as it should be called) has barely led to renewal for the elite, better modes of governance, or improvement in quality of life in SSA. Hence, exploring these controversies, in conjunction with Sub-Saharan Africans'

perspective of the democratic transition and its effect on their well-being, remains of particular interest.

The present dissertation argues that multiparty democracy or electoral competition does not necessarily lead to human development. Thirty years have passed since the introduction of multiparty democracy in SSA, and the region is still lagging as far as improved governance and quality life are concerned.

Obviously, an ill-informed observer may judge as significant the political development that has materialized in SSA in the past thirty years or so. He or she may view that most countries in the region now indulge in multiparty systems and that some state leaders have been voted out through regular elections. The same kind of observer may also think that nowadays there is much more freedom than there used to be some decades earlier under the totalitarian one-party and party-less regimes.

It is equally easy to claim that the wave of democratization in SSA had brought in a broader approach to governance that has helped to move away the central attention of public service reforms from a shallow perspective to a significant one that includes the more audacious policies of fostering government responsiveness and accountability (Alence, 2004). However, with the exceptions of a handful of countries such as Botswana, Cape Verde, and Mauritius, it is difficult to clearly show that the promotion of multiparty systems in SSA have brought about more responsive or accountable governance (2004). To put that in other words, it is difficult to show that the new political system has led to sustained social and economic progress in the region or has even reduced the number of conflicts in it. This assertion is supported by Jeffries' (1993) seminal work, where he maintained that an unselective push for multiparty democracy in Africa could subvert some of the continent's most auspicious cases of effectual governance, among which he cited the non-democratic regime of president Rawlings in Ghana and that of Museveni in Uganda to back his assertion. Jeffries' argument came as a criticism against democracy and the way in which it was being promoted in Africa. His argument was also part of growing pessimism about whether multiparty democracy and development are compatible.

More generally, skeptics have questioned whether political conditionality or putting politicians under greater societal pressures through democratization would lead to significant social, economic, and human development. Indeed, the few significant effects of multiparty democracy on human development in Africa have pushed some influential analysts to conclude that multiparty politics on the continent has mostly helped to set up a simulacrum of institutional integrity behind which an established culture of neo-patrimonialism continues to prosper (Alence, 2004; Bratton & van de Walle, 1997; Chabal 2002; Joseph, 1997 and 1998; van de Walle, 2000).

The argument of this dissertation makes it clear that, for multiparty democracy or any other political system to lead to human development, it ought to be either preceded or followed by social cohesion, which in turn would lead to the quality institutions and economic growth needed to yield socio-economic and human development. Prior to the inception of democracy in SSA, there was low-level cohesion among the ethnic groups. So, the prime role of multiparty democracy in the region should have been to foster social cohesion among the different ethnic groups in order to improve their life condition. The existing literature on democracy and human development in Africa has failed to cover this aspect, and that is why most on the continent are still left with no clues as far as regime choice and human development are concerned. The present dissertation offers a theoretical model of democratic process implementation which may have a better chance of yielding progress and development in Sub-Saharan Africa. The proposed model does not prioritize or favor a specific political system; rather, it calls for a certain initial condition to be met prior to engaging in some efforts to improve the institutional quality or the well-being of the people in the Sub-Saharan region.

1.3 Research Objectives and Key Contributions

The ambitions of this dissertation were: (1) to critically review the literature on multiparty democracy, social cohesion, and human development in SSA with a focus on the alleged improvement in well-being that the population of the region was supposed to enjoy following the inception of multiparty democracy; (2) to determine the effect of multiparty democracy on human development; (3) to determine the effect of social cohesion on human development; (4) to estimate the effect of the interaction between multiparty democracy and social cohesion on human development; and (5) to provide recommendations. The study used panel data from thirty-five countries in SSA over the time spanning from 1995 to 2019. A standard human development model, congruous with much of the literature in democracy and development, was estimated in order to determine the effects of multiparty democracy and social cohesion on human development.

The present study contributes to the literature on multiparty democracy and human development by developing a hands-on theoretical model of democratic reform implementation that goes beyond the current models advocated in the existing studies. This conceptual model may enable future researchers to comprehend how and why democracy and human development remain increasingly challenging to African countries. The proposed model stipulates that any political change, regardless of the party that advocates it or the apparent level of diligence attached, must first be initiated by consolidating social cohesion. The present study also contributes to discussions on the foreign assistance literature by improving upon existing studies that have failed to include the nature of African politics in their analysis. The quantitative aid studies are only heedful of the effects of foreign assistance on democratic development in recipient countries following the organization of elections. Few attempts have been made to extend beyond generic political games to grasp the organization of African political systems, the neo-patrimonial character, ethnic and communal considerations, and their effect on the accomplishment of tangible human development. In suggesting a practical model of policy reform implementation and improving upon the existing literature on democracy and development in Africa, great contributions will be made in the search for sustainable development in SSA and the world, since the improvement in one particular region may cause positive effects in other parts of the globe. In sum, the contributions of the present study are of particular significance to scholars in the field of political science, development studies, or sociology, as well as professional politicians and state leaders. They are relevant and timely for the development of a region that suffers from widespread socio-economic crisis and political disorder.

1.4 Definition of Key Concepts

Democracy. According to the Online Etymology Dictionary (2021), the word democracy originated from the Greek $d\bar{e}mokratia$ (meaning popular government), with *demos* which signifies "common people," and *kratos*, "rule" or "strength." Today, the word democracy is commonly defined as the government of the people by the people; that is, a system of government in which the sovereign power is vested in the people who exercises it directly or indirectly through their elected officials (Online Etymology Dictionary, 2021). As such, democracy implies that the people must take the responsibility for choosing their rulers and representatives, and hence, maintaining their own "rights" against possible or probable encroachments of the government which they have sanctioned to act for them in public matters (Pound, 1933).

Multiparty Democracy. Multiparty democracy is the system of governance in which different parties across the political circle run for national election with an equal chance to gain control of government offices, individually or in coalition. In principle, in a typical multiparty system, political parties are permitted to emerge on their own, without particular constitutional directives that determine their number or nature.

Generally speaking, multiparty systems are viewed as the most relevant political systems for the acquisition and institutionalization of democracy. More than two centennials of political history have revealed that no democracy has survived without a multiparty system in which citizens are free to organize themselves into rival political factions within their political organizations. Successful pluralistic systems rely on the respect of opposition parties and vice- versa for the wish of the people as clearly expressed in polls, and the understanding that ruling parties may soon be in the opposition.

Another characteristic of multiparty systems is that they have many variants which represent the chronicle of the various struggles for democracy in different countries. In Sub- Saharan Africa, the tendency is for countries to copy the model of democracy in use in the colonial power they are associated with or at least borrow much of the essence of their political system from there. However, despite all of the apparent advantages that good democratic systems entail, they are often criticized for generating partisan conflicts, political standoffs and eventually political gridlock. Yet, the level of partisan patterns is strongly related with countries' electoral framework.

Social Cohesion. When one is talking about the level or degree of social inclusion and integration, or the level of inter-connectedness and mutual solidarity within a community and a society in general, one is making an allusion to social cohesion. Social cohesion is said to prevail in a society when people are willing to tolerate and accept each other, and to work together and to follow the rule of society despite the existing differences in their demeanor, culture, and beliefs. In the context of this dissertation, social cohesion is defined as the nature and extent of social and economic divisions within a society (Easterly et al., 2006). Those divisions, as stated by the aforementioned scholars, either through ethnic considerations, language, politics, income class, or other features of human organizations, represent channels through which considerable societal divisions can erupt (Easterly et al., 2006). Yet, a socially cohesive society may not be one that is homogenous, but rather one that has fewer personal advantages or power that individuals could utilize to exacerbate social dividing lines that split the society into homogenous subgroups (Easterly et al., 2006).

Human Development. While the expression or term "human development" is commonly used, it is perceived differently by people across the world. In order to avoid possible ambivalence that the definition of human development may engender, the present dissertation describes it in the technical terms of the United Nations Development Program. As such, "human development" is considered as "a process of enlarging people's choices that enable them to live a long and healthy life, to acquire knowledge and to have access to resources needed for a decent standard of living" (UNDP, 1990, p. 10). According to this definition, three main ideas are central to the human development perspective greatly emphasizes the importance of ameliorating the lives that people live rather than expecting that economic growth will bring about greater opportunities for them. Human development means also empowering people to live the life that they value. In fact, this signifies developing people's abilities and giving them chances and opportunities to use them. Finally, human development should

provide people with more opportunities, rather than just requesting that they make use of them. The process of development or human development, should at least create an environment for people, individually and collectively, to develop to their full potential and to have a reasonable chance of leading productive and creative lives (Human Development Report, 2020).

1.5 Research Scope

Democracy as a term and concept is vague. It may be taken to mean any political system in which power seems to belong to people no matter whether it is a one-party system, or two or more as is respectively the case in the People's Republic of China, the United States of America, and the rest of the world nations operating under the banner of many political parties. In the present research, the focus is only on multiparty democracy, the system by which different parties across the political sphere run for national polls, all of them having the possibility to win the elections, individually or in coalition. The study is thus limited to a specific system, multiparty democracy, and is concerned only with the Sub-Saharan African region.

1.6 Research Structure

The remainder of this dissertation proceeds as follows. Chapter two aims to critically review the literature on multiparty democracy, social cohesion, and human development in the SSA region, with a focus on the relationship among the three concepts. It also lays out the theoretical and conceptual framework of the study. Chapter three introduces the research methodology, the population of the study, the techniques of the data collection and analysis, as well as the measurement of the variables of interest. Chapter four identifies and discusses the key findings derived from the data, which were examined and presented in accordance with the technique described in the third chapter. Chapter five culminates the study with an explanation of the findings and a conclusion regarding their implications. It illustrates the limitations of the study as well.

CHAPTER 2

REVIEW OF THE RELATED LITERATURE AND THEORIES

This chapter reviews the theories and previous studies related to the objectives of the study. Specifically, it examines the effect of multiparty democracy and social cohesion on human development. Key variables from the related literature are used to develop the theoretical and conceptual framework for the study.

2.1 Relation Developmental Systems (RDS) Metamodel

Developed from a process-relational model, the relation developmental systems metamodel stresses the basic approach of human development as consisting of symbiotic interrelations between individuals and their entangled environment (Lerner et al., 2015; Overton, 2015). Hence, from an RDS viewpoint, the coalescence of several levels of organizational contexts shapes the perception of lifetime human development (Overton, 2013; 2015). This assertion by Overton corroborated the findings of some previous works by Bronfenbrenner (2005), and Bronfenbrenner and Morris (2006). According to the aforementioned studies, RDS-based theories do in fact paint the fundamental developmental process as entailing associations among the varying levels of the organizational contexts that constitute the pattern of human well-being.

Other characteristics of RDS-based models are the prospect of nurturing flexible relationships between the individual and their entangled environment, and the implicit malleability of human well-being or development which is said to be central to the RDS approach (Lerner et al., 2015). These features of the RDS theory are believed to yield rationales for the establishment of methodological choices that differ in sampling, design, or measurements from choices made by researchers who employ reductionist Cartesian models to developmental science (Lerner et al., 2015).

Furthermore, the emphasis on how individuals react, and begin to work a plastic relation with their contexts, draws attention to individual agency or to individuals as dynamic producer of their own emergence (Lerner et al., 2015). The interest in individual agency is best substantiated by person-centered strategies to the inquest of human development, and that of interindividual dissimilarities in intraindividual processes as well (Molenaar & Nesselroad, 2015; von Eye, Bergman & Hsieh, 2015). This idea helps also to stress that only Sub-Saharan Africans can take their destiny in their hand by organizing themselves to fight back the adversity that is brought about by multiparty democracy.

To sum up, the RDS-based models stress issues such as the reciprocal and influential individual versus context relationship; the integration of individual's actions on the contexts and that of the numerous levels of the contexts on individuals; the transience and flexibility of human development; and the necessity for adequate methodology. The following examples of RDS-based theories fit the intended research. They will be used in concert with the theory of redistributive politics, the theory of regime type and poverty, and that of social cohesion to provide a context to the analysis of the research hypotheses.

2.1.1 Lerner's Developmental Contextualism

Developmental contextualism is a theoretic approach to the science and inquest of human well-being (Lerner et al., 2015). Built on the integrative ideas found in Schneirla's thinking, the developmental contextualism theory stipulates that the fundamental recipe for human development comprises the changes in the mutual interdependence between the individual and the environment in which they dwell (Lerner et al., 2015). As such, the theory of developmental contextualism emphasizes the bidirectional connections that occur between the individual and the various organizational contexts that are involved in their existence (Lerner, 2006; Lerner et al., 2015). These dynamic relations, as Lerner et al. indicate (2015), yield foundation for the formation of human actions. Put in different words, within the theory of developmental contextualism, the basis of human life consists of a changing configuration of relations (Lerner et al., 2015).

In a nutshell, the developmental contextualism theory mirrors "the idea of dynamic interaction, levels of integration, and self-organization associated with other instances of open, living, developmental system theories of human development" (Lerner et al., 2015, p.19). Since individuals act on the context which in return acts on them, individuals are said to be the effective enablers of their proper emergence (Lerner et al., 2015). Individual and contextual relations therefore enable individuals to engage in "circular functions" that provide a basis for their contribution to the construction of their own developmental system (Lerner et al., 2015). This idea of individuals as effective enablers of their own progress refers to agency theory, a key facet of the RDS metamodel.

Applied to the context of this study, Lerner's developmental contextualism suggests that individual Sub-Saharan Africans (elite politicians and common people) are effective conceivers of their own progress, which occurs through an entangled individual-context mechanism. Multiparty democracy may not be conducive for an African setting, yet, had the population come together to handle the situation in a symbiotic manner, the region could have gotten along with the vicissitudes and other adverse effects that the democratization of the region has engendered.

2.1.2 Brandtstadter's Action Theory of Human Development

Brandtstadter (2006) regarded "action" as a means through which individuals attempt to influence their contexts and, in accordance with the results of such actions, organize their views about their contexts and themselves (Lerner et al., 2015). As an immediate consequence of their action on the context and the resulting feedback, individuals then develop a set of goals and intention of or for future actions (Lerner et al., 2015). According to Brandtstadter (2006), Lerner et al. stated that the outcome of this reciprocal "action-feedback-self-organization-future action" process constitutes human development (2015). Thus, within this theory, it is obvious that action constitutes the "engine" of development and, as such, of person-context relations (the unit of analysis of RDS-based theories).

As in Lerner's developmental contextualism or any other RDS-based theory, here also individuals are the active conceivers of their own evolution. That is, the self (the individual) has to reflect on his or her own interests, intentions, and goals since it is the individual that knows who he or she is at the moment and who he or she would like to be at some time in the future. Those actions for regulating relations with the context are at the core of Brandtstadter's theory of relation developmental systems (Lerner et al., 2015). Again, political leaders and other elites in Sub-Saharan Africa may be the only ones to blame for failing to bend the situation in their favor and to get their countries to profit from the new political system, if there were any profits. However, in failing to act on the context, African governments have shown again that they are either unable or unwilling to get over their personal inclination to work in the best interest of their countries and people.

Brandtstadter's action theory puts particular emphasis on the individual's intention in his or her regulatory actions. These actions, as Lerner et al. stated, both reflect and cause development (2015). Therefore, action constitutes the means through which active individuals, fused with their active context, achieve their potential for plasticity in manners that develop, support, and prosper the self. However, Brandtstadter (2006) explained that the intentions of the individual are limited in terms of the developmental goals that can be achieved due to both individual and contextual constraints on plasticity. In light of the aforementioned explanation, Brandtstadter (2006) proposed three dimensions of scholarship or basic lines of development that ought to be pursued or considered when studying the ontogeny of deliberate personal development. These are:

(1) the development of intentional action in general, and of cognitive and representational processes related to intentionality; (2) the formation of beliefs and competencies related to personal control over development; and (3) the development of the self as a more or less coherent structure of self-referential values, beliefs, and standards that guides and directs self-regulatory processes (Brandtstadter, 2006, p.545).

In brief, in order to further understand the combination among the different levels of the development system that compose the action context for human development, one must consider the social system within which people evolve (Lerner et al., 2015). That system approach to human development was pioneered by Glen H. Elder Jr. and was termed the life-course theory (2015). Elder's scholarship is said to

have been crucial in comprehending the value of one's lifetime in inducing the essence of human development (Lerner et al., 2015).

2.2 Riker and Shayo's Theory of Multidimensional Redistributive Politics

Used to explicate redistributive outcomes in democracies, the Riker and Shayo theory addresses the crucial issue of how voters set preferences or particular identity over election outcomes (Iversen & Goplerud, 2018). The two relation developmental systems theories discussed earlier (Lerner's developmental contextualism model and Brandtstadter's action theory of human development) help to understand why poor voters, the legal status people, and disadvantaged groups in SSA organize themselves to act against the context and unfavorable situations that hold them down in society.

In fact, poor individual voters that identify with their class seek to achieve greater social advantages, not only an increase in material benefit but also a valorization of their own status. If the other poor follow suit and vote in great numbers, their action will likely help to promote redistribution and class status. Yet, identifying oneself or a group as poor has a cost—it yields low prestige. Associating oneself with the nation, on the contrary vests privileges and advantages that are tied to the abundant resources and might of the nation. Thus, voters from poor classes are more likely to identify with the nation and raise themselves and their status.

In order to grasp the meaning of the potential equilibria that voters seek, it is worth noting that whenever the poor majority voters identify with their class, an equilibrium emerges. Their status for identifying with the poor will fall while their income from distribution will grow. On the other hand, poor voters can choose to relate to the nation and reject the resource distribution that they used to see as a means to increase personal average income. However, this preference, as stated by Iversen and Goplerud (2018), often leads to a patriotic low distribution equilibrium.

In sum, in Riker and Shayo's model, individual voters have multiple identities that they can use deliberately they can see themselves as working class, members of a particular group, race, and so forth; and their status or class will determine their propensity regarding resource distribution. The Riker and Shayo's theory of multidimensional redistributive politics assumes that voters have the possibility to relate themselves to a distinct group or to the country as a whole. The saliency of these competing identities is determined by preferences. A key contribution of the Riker and Shayo's model finally has been to show that self-distinctiveness can arise within a society where every individual behaves according to his or her identity in order to maximize personal income or privilege.

This theory fits the context of this study as it helps to understand SSA politics, which is often divided along ethnic, racial, and religious lines. Moreover, Riker and Shayo's theory goes beyond ordinary conflicts over the level of spending between left and right parties, to address non-economic issues such as race, ethnicity, minority rights, and multiculturalism and the struggles of these social groups to improve their income or their living standard or to acquire the needed resources for their own development. Usually, these attempts by voters to influence their context yield positive and immediate responses from the government when the candidates they support access power.

2.3 Regime Type and Poverty Theory

Regime type and poverty theories are founded on the presumption that a close relationship exists between the mode or type of a country's government and the standard of living enjoyed by its people. Moreover, these theories imply that democracy has the potential to improve the living standards of the lowest income groups, while nondemocracy lowers these standards (Acemoglu et al., 2019; Altman & Castiglioni, 2009; Besley & Kudamatsu, 2006; Blaydes & Kayser, 2011; Deacon, 2009; Eterovic & Sweet, 2014; Gerring et al., 2015; Gerring et al., 2012; Haggard & Kaufman, 2008; Hanson, 2015; Kudamatsu, 2012; McGuire, 2013; Miller, 2015; Sen, 1999; Sen, 1981).

At the core of the regime type and poverty model exist three theories (Ross, 2006), two of which are associated with the works of Sen (1999, 1981) on the causes of famine and poverty (Ross, 2006). In his works, Sen first argued that democracy enables the poor to inflict sanctions on governments that enable famines to occur through electoral processes, and that political leaders would act judiciously in order to

prevent famines and avoid sanctions. For him, famines have created millions of fatalities in numerous countries across the world, but they do not kill the rulers... (Ross, 2006). He then added the following:

if there are no elections, no opposition parties, no scope for uncensored public criticism, then those in authority don't have to suffer the political consequences of their failure to prevent famines. Democracy, on the other hand, would spread the penalty of famines to the ruling groups and political leaders as well (Sen 1999, p.180).

Secondly, Sen argues that democracies are better than nondemocracies at disseminating information from remote and poor areas to the central administration thanks to the freedom of the press. He put that in the following terms:

the most elementary source of basic information from distant areas about a threatening famine are enterprising news media, especially when there are incentives provided by a democratic system for bringing out facts that may be embarrassing to the government (facts that an authoritarian government would tend to censor out) (Sen 1999, p.181).

Thus, according to him, even when leaders of a democratic and a nondemocratic government are equally devoted to preventing the occurrence of famine, democratic leaders are more likely to know precisely when action is required (Ross, 2006).

The third theory suggests that a democratic system would make more expenses in terms of welfare benefits for the poor, as compared to nondemocratic regimes. Hence, several scholars opine that democracies expend more on services and public goods as the electoral process compels them to, while non-democratic governments face no such constraint (Ross, 2006). Another set of the same prodemocracy scholars, among whom are De Mesquita, Smith, Siverson, and Morrow (2005), and Ghobarah, Huth, and Russett (2004), added that it is because democratic governments have a wider range of supporters to attend to that they are forced to provide more public goods and services than private ones.

Probably the most preponderant version of this discourse comes from Meltzer and Richard (1981), who had developed a seminal framework on the distributional effects of democracy (Ross, 2006). In their model, democratization occurs when political rights are extended from wealthy families or the elite to the rest of the citizenry. As the right to vote expands, as Meltzer and Richard indicated (1981), the position of the median or say, the decisive voter, whose preferences shape government policies, shifts down in the income distribution (Ross, 2006). Under universal suffrage, explained these two authors, the median voter is likely to earn the "median income" when the income is unevenly shared. However, the median income is less than the mean income (2006); and since the decisive voter, in this context the poor or median voter, earns less than the average income, he or she tends to favor a higher tax rate (because it falls naturally on the wealthy) and more income distribution. In short, democracy brings more people with below-average incomes to the polls, and together they force the government to redistribute income downwards (Ross, 2006).

Meltzer and Richard's theory has inspired much subsequent work on democracy and redistribution, including that of Boix (2003) and Acemoglu, Robinson and Alvarez (2014). The former has built on the Meltzer-Richard model by adding in the effects of capital mobility and exploring the strategic interactions of an elite, who control the state under authoritarian rule, and the masses, who accrue power under democratic rule (Ross, 2006). As for Acemoglu et al. (2014), they have built on the Meltzer-Richard theory by exploring the conditions under which states transit from authoritarian to democracy. As with both Boix (2003) and Meltzer and Richard (1981), Acemoglu et al. (2014) suggested that nondemocratic governments favor the interests of the elite and no redistribution to the masses, while democratic systems favor a broader range of interests and support for redistribution.

A priori, there are good indications that these theories are at least partially correct—democratic regimes seem to care more for social goods and services than nondemocratic governments. Historical studies have shown a partial correlation between suffrage extension and the size of government welfare spending both in the US (Gouveia & Masia, 1998) and more generally in the Western and Latin American countries (Kristov, Lindert, & McClelland, 1992; Lindert, 1994). In addition, a study of 44 African countries by Stasavage (2005) has found strong substantiation that democracy has augmented government spending on education, while a series of analyses of Latin America countries has found that democracy is highly correlated with higher spending on health, education, and social security (Avelino, Brown, & Hunter, 2005; D. S. Brown & Hunter, 2004; Kaufman & Segura-Ubiergo, 2001). Each of these inquiries controls for both country-fixed effects and exogenous time trends, and the Africa and Latin America analyses use improved data (Ross, 2006). However, even if democratic governments increase social expenditure, *a posteriori*, they do not improve infant or child mortality rates, which are considered by many to be the most accurate and comprehensive indicators of social welfare among the poor (Ross, 2006).

2.4 Social Cohesion Theory

In his work entitled "The quest for good governance and development in Sub-Saharan Africa," Chabal (2002) quoted the NEPAD (New Partnership for African Development), declaring that peace, quality governance, socio-political stability, institutional consolidation, and rule of law are necessary for investment and economic growth (Chabal, 2002). Moreover, NEPAD is of the opinion that the aforementioned factors necessary for growth can only be derived from democracy, which has long been considered by Western development agencies and donors as the main precondition for the "takeoff" of any nation intending to transition from a state of underdevelopment to development.

However, such a perception of democracy and its impact on development has been met with strong criticism. Today, it is an open secret that democracy in SSA has neither brought about social cohesion and political stability, nor better institutions and economic growth, which are normally considered the prerequisites for any development. This idea was supported by Easterly et al. (2006), who provided substantial proof to show how social equity and group cohesion can lead to better institutions and economic growth. For these researchers, strengthening cohesion within society by creating and maintaining quality institutions that benefit all members and lower socio-economic cleavages is imperative for countries struggling with growth (Easterly et al., 2006).

Social cohesion within a country is critical for establishing the trust and civic participation required to enact specific reforms as citizens must accept the short-term depravations that naturally arise from reform implementations before the situation ameliorates in due course (Easterly et al., 2006).

This study drew on Easterly et al.'s theory of social cohesion, institutions, and growth (2006). Social cohesion theory was deemed suitable for this study as it emphasizes the reasons for which multiparty democracy has rarely fostered human development in the SSA region. Hence, the search for tangible effects of multiparty democracy and social cohesion on the development of the SSA region occurred in line with the theoretical lens offered by Easterly et al. (2006) as well as the regime type and poverty theories. The same methodological lenses were utilized to address the research hypotheses, which consisted of testing the short-run and long-term upshots of multiparty democracy and social cohesion on the well-being of the people in SSA.

Social cohesion theory is built on Emile Durkheim's seminal work "Le Suicide," in which he examined the association between cohesiveness and suicide. After collecting data that indicated instances in which certain types of people were more inclined to take their own life, Durkheim found that the discrepancies in suicide counts were the outcome of variations in social organization, mostly of disparities in the level and type of social solidarity. However, the theory received momentum thanks to the works of Gough and Olofsson (1999), Bernard (1999), Lockwood (1999), and Berger (2018), who placed greater emphasis on issues such as social integration, social stability, and disintegration. These sociologists not only helped to redefine the concept of social cohesion but also gave a helping hand to design a framework for measuring the cohesion of social groups.

2.4.1 Definition

According to Easterly et al. (2006, p. 105), "Social cohesion is the nature and extent of social and economic divisions within society." Those fractionalizations, either through ethnic considerations, language, politics, income class, or other features of human organizations represent channels through which considerable societal divisions can erupt (Easterly et al., 2006). As such, a socially cohesive society may not be one that is homogenous, but rather one that has fewer personal advantages or power that individuals or groups can overuse to exacerbate social dividing lines that split the society into relatively homogenous subgroups (Easterly et al., 2006).

2.4.2 Key Assumptions

• Countries with less ethnic diversity and a higher revenue shared among middle income classes grow faster than countries with greater ethnic heterogeneity and income inequality.

• Ethnic fractionalization hampers "institution-building": in the absence of strong national cohesion, politicians can exploit people's divisions and that may impede potential political desires to construct higher institutions.

• Countries with higher institutional quality are related with higher economic growth and lower levels of inequality.

• One of the main reasons why even good politicians worldwide, but mostly those in countries struggling with their economies, often implement bad action plans is that they encounter considerable social obstacles in their bids to carry out reforms. These obstacles are determined by the degree of cohesiveness within their respective societies or countries.

• Strengthening cohesion by erecting and preserving effective institutions, and lowering economic and social divisions, is essential for countries struggling with development.

• The more a country's community and institutions are inclusive, the greater the cohesion it builds. Strong ethnic divisions within a country sets dire constraints on the efforts of even the well-informed audacious and civic-minded politicians to enact policy reforms.

2.4.3 Limitations of the Theory of Social Cohesion

Like any other theory, social cohesion has its own limitations, the obvious ones of which are groupthink and the resistance to change.

Groupthink is what occurs in highly cohesive societies when making decisions because group members are likely to refrain from holding dissentious opinions that may harm the cohesion of the group. Opinions expressed by the majority of group members or key influential figures are considered as unanimous, while opposing ideas are dissuaded. Unduly cohesive groups or societies are apprehensive of divergent views expressed by nonmembers. Contradictory views or information

help by outsiders may even be hidden by group members. As we can see, groupthink can lead to abject or unreasoned decisions.

Resistance to Change. Highly cohesive groups' members rely exceedingly on each other and tend to resist external opinions and ideas. Situations like that can lead to seclusion and the impression of being superior to others in an organization. As a consequence, overly cohesive groups hardly change their behaviors, values, or actions, especially when external actors or forces are behind the change. Individual group members may be convinced of the necessity for change, yet they may find it difficult to put change into action due to the power of the group dynamic.

2.5 Human Development in a Nutshell

Referred to as well-being or quality life in parts of this study in order to avoid redundancy of terms, human development has become a central societal goal and a leading priority in national policies across the world in the last three decades or so. It has also for a while now supplanted the idea of wealth as the premier goal of societal development. In addition to what has just been said, the concept of human development has helped to expand the perspective of development by stressing not only the economic features of the issue but also the social and ecological ones. These days, human development appears as one of the most dominant and broadly utilized conceptual frameworks for assessing the well-being of a community (Berger-Schmitt, 2002).

As claimed by the UNDP, "human development is a process of enlarging people's choices that enables them to lead a long and healthy life, to acquire knowledge and to have access to resources needed for a decent standard of living" ((UNDP). 1990, p. 10). The UNDP uses a special acronym, HDI, to measure the achievement of countries and territories in education, personal income, and longevity, using varied indicators such as the corresponding accomplishment in education, life expectancy, and in other "dimensions of human development that are not reflected in a long and healthy life and in knowledge for which *per capita* income is considered as a proxy," as indicated in a UNDP report (2001, p. 240).

In attempts to measure the performance of African countries with regard to human development over the long term and to compare them with similar countries in the rest of the world, de la Escosura (2013) has observed an improvement in human development scores, even though the continent's well-being has fallen behind that recorded in other developing regions, such us South-East Asia or Latin America.

Amelioration in well-being in Africa since the mid-20s, as stated by de la Escosura (2013), is positively correlated with the countries' natural endowment, their geographical position, and access to the sea. However, amelioration was found to be inversely correlated with social, economic, and political turmoil (2013). For him, education was behind the achievements in human development in Africa in that lapse of time. As for life longevity, it was found to have stagnated as a result of the spread of HIV, persistent malaria, and slow growth, which was largely brought about by economic mishandling, political disorder, and civil unrest (de la Escosura, 2013). This unfortunate situation has made improvement in human development practically reliant on education performance since 1990. It has also helped to explain Africa's set back in terms of human development (2013). Another observation by de la Escosura was that, within the African continent, the Sub-Saharan region was lagging behind the northern area despite the occurrence of some conditional convergence mechanisms over the last five decades (2013).

2.6 Multiparty Democracy in Sub-Saharan African Politics

The collapse of the Soviet Union in December 1991 brushed away the superpowers' discord that had formerly dissuaded Western powers from conditioning bilateral aid to democracy (Whitehead, 2004). As a result, African states that were anxious to secure financial help from the West have begun to face tremendous coercion to democratize (John W Harbeson, 2000). To these two misfortunes, one could add another source of pressure from strong internal opposition by the civil society, intended to dislodge the "so-called" authoritarian governments (John Willis Harbeson, Rothchild, & Chazan, 1994). The combination of all of these expertly orchestrated events have brought about what is convenient to be called the re-introduction of the multiparty system in Sub-Saharan Africa.

2.6.1 The Organization of the Sub-Saharan African Political System

In bids to tackle the issue of political development and mainly democratic progress in Africa since the establishment of multiparty systems in the earlier 90s, Matlosa, Ndlowu, Kasenally, and Lodge (2017, pp. 4-5) observed that democratic progress on the continent reveals a "mixed picture." While real improvement is believed to have been achieved, serious drawbacks continue to linger concerning the amelioration and consolidation of quality democratic governance (2017). Beyond the coup d'états, the unconstitutional changes of government, and the lengthening of presidential terms, there is a serious problem concerning the nature of democracy, which appears more procedural than substantive (Matlosa et al., 2017). The procedural character of most African democracies includes the presence of institutions only, such as elections that are held regularly while the substantive character entails results that are produced by regularly elected democratic bodies and the degree or quality of civic participation (Burchard, 2014; Matlosa et al., 2017).

The procedural aspect of the African democracy may explain why multiparty democracy in Sub-Saharan Africa has failed to yield tangible development. Rather, it exhibits a decline in quality democratic institutions, with the preponderance of the executive branches in decision-making. Moreover, the political party structures are relatively weak or non-existent, and so are the legislatures; and there are no political commitments to electoral reform. Some experts have affirmed that Sub-Saharan African democracy and the democracy on the continent in general are evolutionary democracy as opposed to the revolutionary approach. Political party structures and national institutions are still weak while party leaders are strong. In short, political parties and state leaders are above the institutions and there is no sign this will soon stop. This situation is aggravated by the fact that there is practically no formal procedure or structure that allows all party members to contend for a leadership position, or to aspire for succession.

The other factor favoring leaders' supremacy vis-à-vis the political party structure and positions is that there is no term limit for a strong leader in SSA politics. The actual president of Cameroon, Paul Biya, and his Equatorial Guinean counterpart, have been in power for over 40 years each. Yoweri Kaguta Museveni has been ruling Uganda for 36 years and Denis Sassou Nguesso of Congo for a cumulative period of 30 years, while Idriss Deby of Chad was the head of the ruling party and the head of state from 1990 until his death in 2021. The list is not exhaustive; many more heads of state and opposition leaders have been at the political apex for decades.

Party structures are crucial in politics; they help to determine the status, role, and liability of all members. The existing scholarship in politics and political parties on the African continent reveals however that party structures are frail and somehow insubstantial ((Fakir & Lodge, 2015; Matlosa et al., 2017). The same thing can be said with regard to the three basic state institutions, which are the state itself, the rule of law, and accountability. Though they are distinct from each other, these institutions are incapable of guaranteeing that the state will be impartial, that the rule of law will be vigorous and equitable, and that accountability will be exercised in all of its forms (Fukuyama, 2011; Matlosa et al., 2017).

In addition, the constitution in each individual state in SSA upholds strict separation of power among the executive, judiciary, and legislative branches. However, the strong executive leaders, also called "strong men," often seize state resources to their advantage as they have power over all in the country.

2.6.2 The Nature of African Politics (Neo-Patrimonial and Disorder)

Politics in Sub-Saharan African is essentially neo-patrimonial and messy. Regardless of the position of the country with regards to the international benchmarks (Freedom house, Polity IV, etc.) or the type of regime in force in the state, political patronage and clientelism prevail as norms and rules in many segments of the society. Neopatrimonialism co-exists with democracy to produce boundless patron-client systems in which the patrons (big men) enjoy public resources within their circles of clients (Fukuyama, 2015).

In principle, multiparty politics is inconsistent with a neo-patrimonial system, where political rivalry is settled by means of persuasion rather than by winner-take-all voting systems (Alence, 2004; Chabal, 2002; Hopper, 2017). Most contributions in the current literature in African politics blame neopatrimonialism for the continent's disappointing economic records and the large discrepancies between governments' political enticements and the demands of steady development (Alence, 2004; Erdmann & Engel, 2007; Hopper, 2017; Taylor & Williams, 2008; Van de Walle,
2001). Because they are insecure, the failing African governments are tempted to satisfy the immediate interests of politically threatening groups (Alence, 2004). This kind of practice only weakens the institutions and leads to some forms of politicized policymaking and public administration, economically unsound policies, ineffective policy implementation, and rampant corruption (Alence, 2004; Hopper, 2017). As one can see, the neo-patrimonial nature of Sub-Saharan African democracy can hardly lead to sustained development. The reason is simple—in a working patron-client system, the elites engage in campaigns using ostentatiousness and an excessive show of distributable resources (Alence, 2004). Accession to state power is the main path to earn such resources, and the most triumphant patrons are indubitably those that are both politically and economically influential (2004).

2.6.3 Ethnicity and Politics in Sub-Saharan Africa

Posner (2004) and Lindberg and Lindberg (2006) stated that the political parties in Sub-Saharan Africa are related to particular ethnic groups. That relationship, claimed the two authors, is useful to understand what distinguishes one party from another. In the words of Dowd and Driessen (2008), political parties in the SSA region have been differentiated from each other mainly based on whom they represent rather than by what they stand for. Despite the evidence presented by Dowd and Driessen (2008) to suggest important variations throughout Sub-Saharan Africa regarding how ethnically influenced political party systems have tarried since the establishment of pluralistic democracy in the 1990s, the tendency is for ordinary voters to choose the party or candidate of their ethnic group. Political parties, people's choices, and adhesion are purely and simply partisan and ethnic.

The purpose of this section of the present work is less about discussing how and why voters identify themselves with particular ethnic groups (Fearon, 2003; Posner, 2004), but is rather about determining the effects of ethnic politics and choices on the quality of democracy and subsequently on human development. Some researchers have centered the discussion on the effects of ethnolinguistic cleavages on economic growth and democratic consolidation (Dowd & Driessen, 2008); that is, whether or not ethnolinguistic groups in SSA are politicized or not and whether this may have an impact on the development of the region. For another group of scholars such as Alesina, Devleeschauwer, Easterly, Kurlat, and Wacziarg (2003) and Easterly and Levine (1997), there is no doubt that ethnic and linguistic cleavages are accountable for sequences of unfortunate political outcomes, such as the appetence for altercation and the obstruction of democratization (Dowd & Driessen, 2008). The given argument is that the more diverse and divided a society is, the more likely it will be plagued by conflicts. However, other scholars among whom (Posner, 2004) have rejected the use of the ELF indicator, which they considered crude, and have hinted that the main variable to consider is how ethnicity is politicized (Dowd & Driessen, 2008).

In a nutshell, many scholars have contended that the quality of the democracy and that of the institutions conveying it are inclined to suffer when there is ethnic domination in political party systems (D. Horowitz, 1985; D. L. Horowitz, 1993), while others have voiced some doubt about the amplitude of ethnic domination in party systems and its influence on democratic standards (Birnir, 2007; Chandra, 2004, 2006).

The problem here is that, despite all these conflicting claims, there have been few ventures in the existing literature to determine the repercussions of ethnicity in politics on the quality of democracy. So far, the proposed models (both from those that claim that ethnicity in politics is prone to impact the quality of democracy and their adversaries) have failed to adequately specify their claim (Dowd & Driessen, 2008). One of the few pieces of evidence, if not the only one to support either claim, emanates from Dowd and Driessen (2008). In order to arrive at a conclusion, the pair have developed a specific technique to estimate the breadth at which ethnicity might be said to dominate a political party system. They then ran statistical regressions on various estimates of the standard of democracy in order to get to the findings according to which ethnically dominated party systems have in fact considerable effects on some measures of the standards of democracy. Finally, they proposed to integrate the existing electoral models and to create a conducive social and political environment that may decrease the prospect and solicitation for ethnically based parties as a way to increase the standard of democracy (Dowd & Driessen, 2008).

2.7 Multiparty Democracy and Human Development in Sub-Saharan Africa

Generally speaking, multiparty systems are viewed as the most relevant political systems for the acquisition and institutionalization of democracy. Multiparty systems are central to the tradition of modern liberal democracy. They have the merit of permitting the coexistence of several opposing people or views on how social and political matters should be handled without "suffocating" minor opinions or rights. Multiparty democracy is the political system that Western donors have decided to impose on Sub-Saharan African countries in the early 90s in a bid, they said, to develop the region. Three decades have passed since the reintroduction of multiparty democracy in SSA, and the region is still in pursuit of coherent and viable modes of governance and a clear-cut itinerary for social and economic development. As a consequence of some mounting disappointment, many governments on the African continent are slowly falling prey to totalitarianism. This can be seen in the growing concerns of rigged elections or unfair electoral practices or the tendency for incumbent regimes to modify the constitution of their countries to stay in power for ages.

While it seems that democracy does not necessarily lead to people's wellbeing, one can possibly argue that fully established democracies are better destined to cling to equitable development with respect for human rights than authoritarian regimes. This issue was specially addressed by Sen, who has made freedom the prerequisite and main driver of any form of development. In clearer terms, for Sen, if democracy is to lead to human development, a prescriptive way to the promotion of democracy should emphasize the relevance of civil and political rights to individual freedom (1999).

The question here is to determine whether or not multiparty democracy influences human development. As discussed earlier in this section, the literature on democracy and development in SSA appears to demonstrate conflicting views regarding the plausible effects of multiparty politics on the well-being of African communities. Until recently, the most commonly held view in this context has been that multiparty democracy ameliorates human development (Gerring et al., 2015; Gerring et al., 2012), which has been observed in various scholarly works (Altman & Castiglioni, 2009; Besley & Kudamatsu, 2006; Blaydes & Kayser, 2011; Brown & Mobarak, 2009; Deacon, 2009; Eterovic & Sweet, 2014; Haggard & Kaufman, 2008; Hanson, 2015; Kudamatsu, 2012; McGuire, 2013; and Miller, 2015) for instance; and was premised on the belief that popular participation in government empowers ordinary citizens and should, as a result, lead governments to be more accountable to their interests (Gerring et al., 2015). Views of this kind are also held by scholars such as Aristotle, Madison, and some present-day political economists for whom it is undeniable that democracy serves as a mechanism for redistribution and thus for human development (Ross, 2006).

However, recently, the commonly held view according to which democracy influence people's well-being has been fiercely challenged and debunked, with numerous large samples quantitative and qualitative studies conducted to corroborate the absence of tangible association between government type and the quality of life of its citizens (Gerring et al., 2015; Gerring et al., 2012; McGuire, 2006; Ross, 2006; Shandra, Nobles, London, & Williamson, 2004). Thanks to the aforementioned studies, we now know that parts of the most conspicuous ameliorations in people's well-being throughout the course of the twentieth century have occurred under the tenure of some authoritarian leaders in many parts of the world, including SSA, while many democratic societies in the developing world in general have been imbued by unrelenting discrepancies in wealth and rampant poverty. In addition, given recent factual analysis, some of the arguments in favor of the above opinion are questionable. While most people generally believe that democracy would result in higher social expenditures, which, in turn, would subsequently improve the wellbeing of the poor, it has been noted that there is little to no relationship between government welfare spending and the living standard of their people beyond the context of the OECD countries (Filmer & Pritchett 1999; McGuire, 2006). Further, as Gerring et al. (2012) observed, "the stipulated mechanisms of the welfare state do not lead, at least not in any consistent fashion, to an improvement in social welfare as measured by mortality, literacy, and other human development outcomes" (p. 1-2). Thus, they added that "even if one brackets the question of economic growth (thereby

assuming that regime type is growth neutral), the case for democracy as a welfareenhancing mechanism appears shaky" (2012, p. 2).

In bids to reconcile these two views and to probe deeper into the relationship between regime type and quality or standard of life, Gerring et al. (2012) have introduced the possibility that the effects of democracy on human welfare may be longer-term, marked by an indirect rather than a direct causal relationship. Hence, these authors opine that empirical works must test the relationship between the two variables while accounting for the time lag of the model. Owing to further research and a series of statistical checks with the child mortality rate as the main measure of human development, in conjunction with two hypotheses (the first, replicating the traditional causal relationship between the child mortality rate of a country and its democratic achievements in the previous year; and the second, measuring democracy with a "stock" indicator that captures the history of a country's government system from 1900 to the year of observation), Gerring et al. (2012) have found that the contemporary level of a country's democracy has little relationship with enhanced human development, while a country's historical experience with democracy has a close association with human welfare or development. Hence, the researchers concluded that democracy does ameliorate human development only in cases where it is considered a historical or "stock" phenomenon. In simple terms, this implies that if the principles of democracy are upheld over a long while in a country, its direct effect will be resolute for the welfare of its citizens. Where one stands today depends essentially upon where one has been (Gerring et al., 2012).

In the context of the present study, the measure of human development extends beyond the infant mortality rate (*Gerring et al.*, 2012) to relate to the quality of life, improvement in personal income, environmental conditions, and healthcare and education attainment (1979). Hence, it is difficult to suggest that sustained or meaningful human development has occurred in Sub-Saharan Africa. Thus far, the multiparty democracy has not eradicated poverty or hunger in the region, which are incompatible with any form of development.

In addition, people are said to be free to choose, to believe or not, to express their view..., but all these forms of freedom are only nominal because governments in the region have signed and ratified several international treaties such as the Universal Declaration of Human Rights which guarantees them.

2.7.1 Multiparty Democracy and Peace

The widespread post-election violence occurring in the SSA region since the inception of multiparty democracy perfectly illustrates the gap between democracy and peace in that part of the world. The existing literature on peace and democracy draws attention to the potential tensions between the two concepts. Yet, in doing so, it tends to minimize the issue, and to regard the unfortunate Kenyan 2007-2008 post-electoral as exceptional.

Multiparty democracy has yet to deliver the peace and stability that foreign aid donors and experts have long pledged to Sub-Saharan Africans. This can be seen in the incessant peace campaigns that peak in the wake of elections, which by the way means risk of violence if not violence itself. These so-called peace campaigns also have lengthy stories and are considered as common features of multi-party elections across sub-Saharan Africa (Lynch, Cheeseman, & Willis, 2019). The campaign spots include peace awareness messages, by which famous politicians and celebrities alike are called upon to campaign for participation and acceptance of election results. The spots also include other selected peace-building endeavors, from inter-community talks and meetings to activities that aim at engaging potential participants in nonviolence (Lynch et al., 2019). This clearly indicates that there was no social cohesion or peace prior to the introduction of multiparty democracy, and that one must be fostered and maintained immediately.

The existing literature is prolific in examples from several SSA countries, among which are Sierra Leone, Côte d'Ivoire, Ghana, Nigeria, Uganda, and Kenya, which is practically a theater of violence before and after every election (e.g. in 2007, 2013, 2016). In the course of Sierra Leone's 2018 polls, there have been strong peace and unity messaging in which political parties and leaders were reminded of their prime duty of preaching peace and non-post electoral violence (Lynch et al., 2019). In Nigeria, a similar scenario happened in 2015. Local activists and politicians were joined by the international community to support the electoral process with strong conflict mitigation measures such as risk analysis, preventive mediation, and peace

messaging. Women in Côte d'Ivoire came up with some special clothing called "peace pagnes" in prelude to the 2015 elections to help campaign for peace (Lynch et al., 2019).

The frequency and regularity of such campaigns across Sub-Saharan Africa, as stated by Lynch et al. (2019), including even relatively peaceful countries such as Ghana and Tanzania, together with their long history, simply indicates that the events are not bound to the aftermath of conflicts or transitional situations. It cannot just be explicated by the latest experiences of violence. Actually, according to the authors' awareness of the elections in Ghana in 2016, Kenya in 2007, 2013 and 2017, and Uganda in 2016, it was evident that the intensity of the peace campaigns around Ghana's 2016 election was second only to that observed in Kenya in 2013 (Lynch et al., 2019). This reality simply proves that multiparty democracy has yet to foster peace on the continent three decades after it was imposed on the Africans.

2.7.2 Multiparty Democracy and Foreign Aid

In the 1990s and 2000s, the donors' community in concert with some proponents of the so-called foreign aid have donated hundreds of billions of dollars of aid across the world, in support of a "global democratic revolution" (Dietrich & Wright, 2015). Much of these financial contributions had gone to Sub-Saharan Africa (2015). While it is common knowledge that tremendous amounts of money have been poured into SSA to promote multiparty democracy, not much is known about the effect of this aid on the democratization of the region. Goldsmith (2001) and Dunning (2004) have attempted to claim that foreign aid and precisely that poured into SSA have influenced democracy in the region, but neither study has attempted to look into the causal linkage between aid and democratic reforms (Dietrich & Wright, 2015).

Looking into such mechanisms in the SSA region where approximately half of the world democratic transitions have occurred from 1989 to 2008, Posner and Young (2007) and Cheeseman (2010) have found that the shift to multiparty democracy through aid provision has not in fact led to a surge of consolidated democracy (Dietrich & Wright, 2015). In fact, Dietrich and Wright (2015) stated that in the 20 years of a hard push, only eight sitting presidents have been ousted as a result of fair regular elections under established multiparty regimes. Hence, in most countries in SSA, the inception of multiparty democracy has not led to cogent democratic institutions. However, according to Gibson, Hoffman, and Jablonski (2015), the political changes that intervened in SSA have had greater magnitude than what scholars have narrated. In 1994 only, they argued that multiparty elections were held in 29 countries and electors have expelled 11 incumbent presidents, while three more have declined to run in these elections. What Gibson and his colleagues have failed to realize is that, within a few years, power has shifted back to the unseated rulers again (Joseph, 1997). Only a handful of new democracies progress toward fully participatory systems (1997). Moreover, more than half a dozen of SSA presidents have managed to cling to power despite pressure.

In order to further investigate any plausible effect of aid on democracy, Dietrich and Wright (2015) have examined two contingencies by which aid might influence democracy in recipient countries. The first possibility is political conditionality, and the second is dealing with donors literally funding democratic promotion through diverse actions intended to strengthen state institutions and the civil society. These mechanisms, stated Dietrich and Wright (2015), target different types of aid and have implications for well-defined political outcomes (Dietrich & Wright, 2015).

In summary, inquiries that link international aid to democracy present a mixed picture (Dietrich & Wright, 2015). On the one hand, some argue that despite the use of foreign aid conditionalities and some thinly veiled threats to retract or redirect aid packages when recipient countries fail to comply, donor pressure has rarely led to sound democratic transitions in Sub-Saharan African countries (Burnell, 1997; Dietrich & Wright, 2015; Dunning, 2004; Haass, 2018). In Malawi for instance, donors used aid to get the country to organize its first multiparty election in 1993 (Resnick, 2012). The same pressure was used in Ghana against president Jerry Rawlings to push him to liberalize the political regime and to return to constitutionalism (Handley, 2008); yet both examples of "sold and bought democracy," and many more in SSA, were far from being substantive. The only changes they had brought about were the organization of pluralist polls, which were won in most cases by incumbent rulers. Bermeo (2011) and Wright (2009) have found that the only instances where the use of international aid has led to political reforms or

had an impact on democracy were in countries where incumbent presidents were sure to cling to power. Dictators with minority coalitions and with a minor chance of sticking to power always tend to oppose democracy.

On the other hand, however, other researchers maintain that democracy assistance aid does indeed influence democratic processes through direct investment mechanisms that target either incumbent governments or democratizing instruments in civil society (Gibbon, Bangura, & Ofstad, 1992; Nelson, 1990; Resnick & Van de Walle, 2013). Concerning the same investment mechanisms, some other studies have confirmed that democracy assistance does in fact improve the quality of democracy, as determined by inclusive democracy indices or indicators (Finkel, Pérez-Liñán, & Seligson, 2007; Resnick & Van de Walle, 2013; Scott & Steele, 2011).

2.7.3 Multiparty Democracy, Foreign Aid, and Quality Institution

Until recently, most studies on international aid and regime type have tested how foreign assistance affects democracy, using broad indicators or measures from specialized institutions such as the Polity IV index or Freedom House (Dietrich & Wright, 2015). Though helpful for many uses, these measures are incapable of discerning the specific features of democratic transition and consolidation (Dietrich & Wright, 2015; Gibson et al., 2015).

In order to determine how the political effect of economic aid differs from that of democracy aid, Dietrich and Wright (2015) have explicated the hypothesized pathways that link aid to democracy by analyzing numerous dimensions of democratic change. They have also tested how several large categories of aid influence these outcomes. The results have shown that donor organizations practice an "incumbent-led promotion" of democracy in Africa when engaging with autocrats and democrats (Dietrich & Wright, 2015). While the donor community utilizes aid to push for vertical democratic changes both before and after conversion to multiparty systems of government, they do so by tailoring different strategies (Dietrich & Wright, 2015). For instance, when taking action with regards to autocrats, donor groups resort to economic development aid to push for democratic reforms or the promotion of inclusive elections. Whilst such reforms suffice to occasion nominal transitions to multiparty systems, they may not, as a matter of course, change the balance of power between those currently holding office and the opposition parties; nor do these reforms demand elites to cease or at least change their political malpractices (Dietrich & Wright, 2015). We can now understand how and why Mr. Paul Biya, the president of Cameroun and his counterpart, Teodoro Obiang of Equatorial Guinea, and other autocrat leaders in Africa have managed to remain in power for decades.

The investigation led by Dietrich and Wright (2015) has also shown that while economic assistance can be used to push for cheap political reforms, direct aid for democratic consolidation could equally help to improve multiparty systems, though they are rarely used to influence the political balance between incumbents and the opposition in recipient countries. These findings show the merit of distinguishing between aid types and accurately assessing the political outcomes that match most the causal story (Dietrich & Wright, 2015).

Finally, while it is obvious that donor collaboration is critical in pushing for democracy in Africa and the SSA region in particular, S. Brown (2011) has shown that their calls for elections are just procedural reforms. He came up with interview results from donors working in Malawi, Kenya, and Rwanda to reveal that financial aid beneficiaries often hear an unceasing political reform message that stresses pluralist elections; but after transitions, stated Brown, there is no donor consensus on the specific goals of democratic transitions (2011). For instance, aid donors do not have the same view on how democracy should be consolidated, particularly when they face difficult decisions in choosing among consolidating democratic achievements, development, and stability in recipient countries, as concluded by S. Brown (2011).

2.8 Social Cohesion and Human Development in Sub-Saharan Africa

The literature on social cohesion and human development has not been prolific regarding the relationship between the two concepts. Few theoretical and empirical attempts have been made to establish a linkage, both direct and indirect, between the two concepts. In a study that aimed to explore the potential effects of social cohesion on human development using state legitimacy as a mediator between the two variables, Seyoum (2020) finds that social cohesion has a direct and an indirect effect on the well-being of people, i.e., human development. Using data from 180 countries and the state fragility index as a proxy of social cohesion, the latter study identifies several aspects of a socially cohesive state with a significant influence on poverty alleviation and sustained development (Seyoum, 2020). However, decreased or absent social cohesion was found to generate a lack of successful institutions, which, in failed states, are characterized by political and economic rules and regulations that frequently promote indecency and undermine the fair distribution of public wealth (Easterly et al., 2006; Seyoum, 2020). Although resources may proliferate in a failed state, they are seldom used to address public poverty or improve the health system. Hence, the consequence of state fragility would eventually be felt in education (e.g., poor school systems and facilities, the lack of quality and quantity of teaching materials), healthcare (poor healthcare systems and facilities, and inadequate treatment), and income distribution (inequality and discrimination in GDP per capita, unequal access to state resources). The findings consider a tangible relationship between the inadequate provision of goods and public services with state failure and fragility; hence, Amate-Fortes, Guarnido-Rueda, and Molina-Morales (2017) conclude that the state's incapacity to provide for security, necessary goods, and services also has a negative effect on economic growth and thus on human development.

A similar study by Rotberg (2010) has found that whenever a state fails, its population will disperse, the human capital will be drained, and the total production and per capita incomes will dwindle. State failure is also found to cause governments to fail to account for their citizens and to be unable and at times unwilling to formulate policies to reduce poverty and advance human development. In short, failed states suffer from a dearth of good governance, ranging from the establishment of credible institutions to the consolidation of democratic achievements, and a dearth of rule of law and equity.

In addition, a 2018 OECD report has found that state fragility is mainly caused by a lack of cohesion within a society and the fractionalization of the latter into groups with opposing identities and daily struggles. Worse of all is that in the absence of social cohesion, even the elites, who are supposed to unite people, tend to be factionalized and to regard the state as a personal profit rather than a politically organized unit to be developed for the common interests.

Another great contribution of the literature in terms of social cohesion and human development comes from Easterly et al. (2006). This study indicated that aspects of the lack of cohesion within a country, such as ethnic fractionalization and income inequity, endogenously influences the quality of its institutions, which in turn shapes economic growth. With the knowledge that economic growth fosters human development, the study of Easterly et al. appears as proof of an indirect effect of social cohesion on human development.

Inequalities and ethnic fractionalization are today the foremost challenges that Sub-Saharan Africa is facing due to dreadful disparities between the rich and the poor. Ethnic fractionalizations and inequality of any kind are channels through which considerable social unrest can erupt (Easterly et al., 2006).

In summary, social cohesion is proven to be indispensable for SSA countries to transit to human development. Its absence may cause dire social pathologies that may not only have an effect on economic issues, but also endanger the subsistence and viability of the society at large (Durkheim, 1897). Nowadays, it is unanimously agreed that human development not only depends on economic issues, but also on numerous social consensuses to be met.

2.9 Conceptual Framework

The literature on democracy and development in Africa has failed to address specifically the issue of multiparty democracy, which seems to be one of the main causes of the underdevelopment in the SSA region. Few authors have realized that the real problem is not democracy itself, but the fact of having several political parties contending for power in settings where tribal, ethnic, and regional considerations prevail. In order to regulate conflicts and stability in Lesotho for instance, the country had to institute some electoral reforms such as "party switching," also called the Mixed Member Proportional election system (MMP). In other countries such as Uganda, multiparty democracy was banned from 1986 to 2005 to curve sectorial tension; and Swaziland enjoyed only ten years of multiparty democracy (1968-1978) before it returned to a party-less system and ended up in a form of monarchial democracy. The literature has thus failed to identify the real key to development in Sub-Saharan Africa, which is social cohesion and political stability, without which no progress is possible. To proceed with the present investigation, the author has decided to incorporate the concept of social cohesion to the existing literature and studies on multiparty democracy and human development and to use a series of cogent hypotheses, including an interaction term between multiparty democracy and social cohesion in order to check whether the latter (social cohesion) could dampen the negative impact of multiparty democracy on human development. Then the expanded literature is used to generate a list of variables in order to specify a model and to test the hypotheses.

2.9.1 Formulation of Hypotheses

The purpose of this research is to inquire, not only about possible relations among multiparty democracy, social cohesion, and the quality of life in SSA, but also concerning the eventual effect that this form of the political system has had, or is having, on the level of education, the longevity, and personal income of the populations of this area. More than three decades have passed since the inception of multiparty democracy in Sub-Saharan Africa, and the region is still in search of stability (both social and political) and a better regime type for its development. In order to attain the research purpose, the following hypotheses have been developed:

H1: Multiparty democracy has a positive effect on human development.

H2: Social cohesion has a positive effect on human development.

H3: The interaction between multiparty democracy and social cohesion has a positive effect on human development.

In hypothesis 1, a distinction is made between the long-and short-term effects of multiparty democracy on human development. This hypothesis is consistent with the literature on democracy and development, where an immediate relationship and a log-run effect between the two variables are often observed. This may be viewed through the lens of "supply" (post-electoral government provisions and stimulus packages) or "demand" (advances in human development as demanded by voters). In either observation, multiparty democracy may have a short-term relationship or effect on human development.

Alternatively, with regard to the distal effect of multiparty democracy on human development, this effect may manifest as an increase in economic growth, which eventually leads to higher per capita income, higher achievement in health, education, etc. In this optic, it is possible to affirm that the effects of multiparty democracy on human development are not immediate; rather, they present themselves in the longer run. Countries must enjoy economic growth first before their populations receive the benefits attached to the same. This long-run effect is also echoed in H1.

In hypothesis 2, however, the empirical evidence offered by extant literature indicates a long-term relationship between social or community cohesion and human development. This is observed *via* the attainment of quality institutions first, where the latter induces economic growth, subsequently bringing about an improvement in human development (see Easterly at al., social cohesion, institutions, and growth theory - section 2).

Similar to H1, hypothesis 3 exhibits a twofold relationship; one that is immediate and the other in the long run, in relation to the interaction effect between multiparty democracy and social cohesion on human development. These relations are observed through "supply" and "demand", as explained in hypothesis 1. The assumption of all of the hypotheses suggests a positive, rather than negative relationship, between multiparty democracy, social cohesion, and human development. This is in line with most theories and empirical research findings in the literature on these relations.

Several variables are identified as relevant to this study: four dependent variables (human development index, infant mortality, life expectancy, and basic drinking water); five independent variables of interest (multiparty democracy 1 and 2, political rights, civil liberties, and social cohesion); four measured control variables (GDP per capita, institutional quality, population growth, and political stability). Drawing on these variables and the relationship among them, the conceptual framework of this dissertation can be visualized as follows:

 HD_GR , $it = \beta 1 democ$, $it + \beta 2 pr$, $it + \beta 3 cl$, $it + \beta 4 iq$, $it + \beta 5 gdppc$, $it + \beta 6 pgr$, $it + \beta 7 ps$, it, for the possible effects of multiparty democracy on human development.

 HD_GR , $it = \beta 1sc$, $it + \beta 2iq$, $it + \beta 3gdppc$, $it + \beta 4pgr$, $it + \beta 5ps$, it, for the possible effects of social cohesion on human development.

 HD_GR , $it = \beta 1 democ$, $it + \beta 2sc$, $it + \beta 3 democsc$, it, $+ \beta 4iq$, $it + \beta 5gdppc$, $it + \beta 6pgr$, $it + \beta 7ps$, for the possible effects of the interaction of multiparty democracy and social cohesion on human development.

HD_GR will stand for the dependent variable (human development); the subscript i will denote the entities (Sub-Saharan African countries), and t will refer to the time or year; Democ will stand for multiparty democracy; PR will stand for political rights; CL will stand for civil liberties; SC will stand for social cohesion; DemocSC will stand for the interaction between multiparty democracy and social cohesion; IQ will stand for institutional quality; GDPPC will stand for per capita GDP; PGR will stand for population growth; PS will stand for political stability; and β 1, β 2, β 3, β 4, β 5, β 6, and β 7 are the coefficients of the different variables.

2.9.2 Model Specification

The specification of the statistical models within this study was based on the review of the literature and associated theories. Four different measures of multiparty democracy were included in the basic models and two in the dynamic models. Among the four measures of democracy, three came from the most popular institution, Freedom House and one, from Polity 5. This approach is consistent with the existing literature, where several scholars have used at least two of the same measures for the variable of democracy (Gerring et al., 2015; Gerring et al., 2012). Hence, multiparty democracy 1 (the Freedom House measure of democracy) is termed Democ1 and multiparty democracy 2 (the Polity 5 measure of democracy), Democ2. The variable "multiparty democracy 1" or Democ1 was disintegrated to its components levels and two more measures and variables, political rights (PR) and civil liberties (CL), were added to the analysis. The choice of the fifth independent variable, social cohesion (SC), was also consistent with the literature (Amate-Fortes et al., 2017; Easterly et al.,

2006; OECD, 2018; Rotberg, 2010; Seyoum, 2020). The dependent variables of this study were the human development index (HDI), the variable of interest, and three of its proxies: infant mortality (IMR), life expectancy (LEXP), and basic drinking water (BASW). With the exception of the fourth named variable, basic drinking water (BASW), which was the creation of the present author, infant mortality, life expectancy, and human development index are prominent in human development research (Altman & Castiglioni, 2009; Besley & Kudamatsu, 2006; Blaydes & Kayser, 2011; Deacon, 2009; Gerring et al., 2015; Gerring et al., 2012; Hanson, 2015; Kudamatsu, 2012; McGuire, 2006, 2013; Miller, 2015; Ross, 2006; Shandra et al., 2004). As for the interaction between multiparty democracy and social cohesion, they were termed Democ1SC (for the interaction between multiparty democracy 1 and social cohesion) and Democ2SC, for that of multiparty democracy 2 and social cohesion. Finally, the decision was made to control for institutional quality (IQ), per capita GDP (GDPPC), population growth (PGR), and political stability (PS) in order to curb their influence on the dependent variable, which could have biased the statistical results. The basic models are specified as follows:

 $HDI, it = \beta_1 democ, it + \beta_2 pr, it + \beta_3 cl, it + \beta_4 iq, it + \beta_5 gdppc, it + \beta_6 pgr, it + \beta_7 ps, it + \alpha_i + u_i$

(1)

 $IMR, it = \beta_1 democ, it + \beta_2 pr, it + \beta_3 cl, it + \beta_4 iq, it + \beta_5 gdppc, it + \beta_6 pgr, it + \beta_7 ps, it + \alpha i + uit$ (2) $LEXP, it = \beta_1 democ, it + \beta_2 pr, it + \beta_3 cl, it + \beta_4 iq, it + \beta_5 gdppc, it + \beta_6 pgr, it + \beta_7 ps, it$

$$\alpha i$$
 + Uit

(3)

+

 $BASW, it = \beta_1 democ, it + \beta_2 pr, it + \beta_3 cl, it + \beta_4 iq, it + \beta_5 gdppc, it + \beta_6 pgr, it + \beta_7 ps, it + \alpha_1 it + \alpha_1 it + \alpha_2 it + \alpha_1 it + \alpha_2 it + \alpha_1 it + \alpha_2 it +$

(4)

$$HDI, it = \beta_{1sc}, it + \beta_{2iq}, it + \beta_{3g}dppc, it + \beta_{4pgr} + \beta_{5ps}, it + \alpha_i + uit$$
(5)

$$IMR, it = \beta_{1sc}, it + \beta_{2iq}, it + \beta_{3g}dppc, it + \beta_{4pgr} + \beta_{5ps}, it + \alpha_i + uit$$
(6)

$$LEXP, it = \beta_{1sc,it} + \beta_{2iq,it} + \beta_{3gdppc,it} + \beta_{4pgr} + \beta_{5ps,it} + \alpha_i + uit$$
(7)

BASW,
$$it = \beta_{1sc}, it + \beta_{2i}q, it + \beta_{3g}dppc, it + \beta_{4p}gr + \beta_{5p}s, it + \alpha i + uit$$
 (8)

$$\begin{split} HDI, it &= \beta_{1}democ, it + \beta_{2}sc, it + \beta_{3}(democsc)it + \beta_{4}iq, it + \beta_{5}gdppc, it + \beta_{6}pgr \\ &+\beta_{7}ps, it + \alpha i + uit \\ (9) \\ IMR, it &= \beta_{1}democ, it + \beta_{2}sc, it + \beta_{3}(democsc)it + \beta_{4}iq, it + \beta_{5}gdppc, it + \beta_{6}pgr \\ &+\beta_{7}ps, it + \alpha i + uit \\ (10) \\ LEXP, it &= \beta_{1}democ, it + \beta_{2}sc, it + \beta_{3}(democsc)it + \beta_{4}iq, it + \beta_{5}gdppc, it + \beta_{6}pgr \\ &+\beta_{7}ps, it + \alpha i + uit \\ (11) \\ BASW, it &= \beta_{1}democ, it + \beta_{2}sc, it + \beta_{3}(democsc)it + \beta_{4}iq, it + \beta_{5}gdppc, it + \beta_{6}pgr \\ &+\beta_{7}ps, it + \alpha i + uit \end{split}$$

Where:

- HDI,*it* represents the human development index for entity i = 1,...,n, and period t =1,..., T.

- IMR, *it* represents infant mortality rate for entity i = 1, ..., n, and period t = 1, ..., T.

- LEXP, *it* represents life expectancy for entity i = 1, ..., n, and period t = 1, ..., T.

BASW, *it* represents access to basic drinking water for entity i =1,..., and period t =1,..., T.

– Democ stands for multiparty democracy, and β_1 is its coefficient.

– SC stands for social cohesion and β_2 is its coefficient.

– DemocSC stands for the interaction between democracy and social cohesion and β_3 is its coefficient.

– IQ stands for institutional quality and β_4 is its coefficient.

– GDPPC stands for per capita GDP and β_5 is its coefficient.

- PGR stands for population growth and β_6 is its coefficient.
- PS stands for political stability and β 7 is its coefficient.
- $-\alpha$ i (i=1....n) is the unknown intercept for each country (n entity-specific intercepts).
- **u**it is the term of error.

However, the dynamic panel models are specified as follows:

 $HDI, it = hdi, it - 1 + \beta_1 democ, it + \beta_{2sc, it} + \beta_3 (democsc)it + \beta_4 iq, it + \beta_5 gdppc, it + \beta_6 pgr + \beta_7 ps, it + \alpha_i + uit$ (13)

 $IMR, it = imr, it - 1 + \beta_1 democ, it + \beta_2 sc, it + \beta_3 (democsc)it + \beta_4 iq, it + \beta_5 gdppc, it + \beta_5 democsc) + \beta_5 democsc + \beta_5 democsc + \beta_5 democsc) + \beta_5 democsc + \beta_5 democs$

$$\beta_{6pgr} + \beta_{7ps,it} + \alpha_i + u_{it} \tag{14}$$

$$LEXP, it = lexp, it - 1 + \beta_1 democ, it + \beta_2 sc, it + \beta_3 (democsc)it + \beta_4 iq, it + \beta_5 gdppc, it + \beta_6 pgr + \beta_7 ps, it + \alpha_i + uit$$
(15)

BASW, it = basw, $it - 1 + \beta_1 democ$, $it + \beta_2 sc$, $it + \beta_3 (democsc)it + \beta_4 iq$, $it + \beta_5 gdppc$, $it + \beta_6 pgr + \beta_7 ps$, $it + \alpha i + uit$ (16)

Where:

- HDI, *it* represents the human development index for entity i at time t, and hdi, it -1 is its one year lag variable.

- IMR, *it* represents infant mortality rate for entity i at time t, and imr, it -1 is its one year lag variable.

- LEXP, *it* represents life expectancy for entity i at time t, and lexp - 1 is its one year lag variable.

BASW, *it* represents access to basic drinking water for entity i at time t, and basw –
1 is its one year lag variable.

– Democ stands for multiparty democracy, and β_1 is its coefficient.

– SC stands for Social Cohesion and β_2 is its coefficient.

– DemocSC stands for the interaction between democracy and social cohesion and β_3 is its coefficient.

– IQ stands for institutional quality and β_4 is its coefficient.

- GDPPC stands for per capita GDP and β_5 is its coefficient.
- PGR stands for population growth and β_6 is its coefficient.
- PS stands for political stability and β 7 is its coefficient.
- $-\alpha$ i (i=1....n) is the unknown intercept for each country (n entity-specific intercepts).
- $-\mathbf{u}$ it is the term of error.



CHAPTER 3

METHODOLOGY

This chapter addresses the overall strategy utilized in the present dissertation. It provides detailed explanations of the chosen approach, the population, the sample size, and the data collection and analysis process.

3.1 Research Design

The present dissertation uses a quantitative research approach to determine the effect of multiparty democracy and social cohesion on human development in SSA. Quantitative approaches permit researchers to use quantifiable data to formulate facts and to unveil patterns in a research study (Babbie, 2020; Creswell, 2014; Rich, Brians, Manheim, & Willnat, 2018). Broadly speaking, quantitative techniques are utilized to lay out concise data that support propositions about the phenomenon of interest (Babbie, 2020; Rich et al., 2018).

In the present research study, the quantitative approach is used to quantify, aggregate, and compare data and observations about the issue of development in the SSA region and to come up with conclusive results concerning the effect of multiparty democracy and social cohesion on human development in that part of the world.

The quantitative approach was selected over the qualitative one because of its positivist association (see Appendix A). A positivist explanation, as a contrasting epistemology to interpretivism, is premised on finding and certainty, and can be considered objective due to the large amount of quantitative data involved (Guba & Lincoln, 1994). The quantitative approach, which is carried out by positivist techniques through the analysis of quantifiable data in order to test an existing theory (Firestone, 1987), is used to address the research hypotheses. Quantitative methods employ prescribed procedures in order to ensure validity and reliability and to help

avoid personal bias by staying away from the participants of the research, and using generally approved computational procedures (Babbie, 2020; Rich et al., 2018). As a consequence, their results are of greater objectivity and accuracy when compared to qualitative methods.

Creswell (2014) identified four strategies that can be used in a quantitative research design. These are: the descriptive strategy, the correlational, the causal comparative or quasi-experimental, and experimental research. Strategies that only seek to depict the current position of a given variable or call for experimentations were excluded by the researcher since the aim of the present study was to determine whether multiparty democracy has had or is having any effect on the well-being of the SS African populations. Another exclusion criterion was the focus of the strategy. Being so emphatic about the difference between two groups or the identification of a causative relation between a predictor and outcome variables, the causal comparison was considered to be inappropriate for this study. Therefore, the correlational strategy emerged as the best fit for the present dissertation.

3.1.1 Correlational Research Strategy

The present dissertation uses a correlational approach to determine the effect of multiparty democracy and social cohesion on human development in SSA. Correlational research entails a methodical examination of possible relations that exist between a set of variables, instead of the immediate cause and effect relations. Correlational research strategies are cross-sectional or longitudinal by essence. They are utilized to determine if variations in an outcome or criterion variable are related to possible changes in one or more predictor variables. This is exactly the case of this dissertation, where the researcher sought to inquire whether the variations in HDI as measures of peoples' well-being are attributed to regime type (multiparty democracy) in use in the SSA region, or to the presence or absence of social cohesion while controlling for other possible determinants. A longitudinal design is useful in this context as it helps to predict the variance of development scores based on that of the regime type or other variables. The only set back of longitudinal-correlational research plans is that they cannot help to reach conclusions about the causal relations or associations between the studied variables.

3.2 Population and Sample

The population of this study comprises the member states of the SSA region that have experienced democracy for a long period of time. There are 46 countries in total in SSA according to the UNDP and 48 according to the World Bank, that is, the 46 countries labeled SSA states by the UNDP, plus Somalia and Sudan. The present dissertation takes only into consideration the list of countries recognized as Sub-Saharan by the UNDP. The sample is made up of all countries in SSA that have had a minimum of 25 years of democratic experience, and the sample frame constitutes the Eastern, Western, Central, and Southern African countries and is representative of the four sub-regions of the main Sub-Sahara region.

Bryman and Bell (2015) stated that sampling techniques are of two types: probability and non-probability. Probability sampling incorporates a random selection process of what or who is supposed to be included, whereas non-probability samples are based on the subjective judgment of the researcher (Bryman & Bell, 2015). The sample for this study was a non-probability convenience sample of 35 Francophones, Anglophones, and Portuguese language speaking countries in the SSA that experienced democratization in the early to late 90s for the majority of them. Yet, all of these countries have similar traits of exposure and a "jolt" from being unprepared for the new system—multiparty democracy.

3.3 Inclusion and Exclusion Criteria

Included in the sample of the present study were all SSA countries that came to multiparty democracy in the early, mid or late 90s, or that have had a minimum of 25 years of experience as a democratic country (see Table 3.1). Excluded from the study are all countries that have individually a combination of fewer than 25 years of experience in democracy regardless of the year of independence (see Table 3.2).

Country	Independence	Began Democracy	Experience with
Democracy			
Angola	11/11/1975	ca. 1992	ca. 27 years
Benin	01/08/1960	ca. 1991	ca. 28 years
Botswana	30/09/1966	ca. 1966	ca. 53 years
Burkina Faso	05/08/1960	ca. 1991	ca. 28 years
Burundi	01/07/1962	ca. 1992	ca. 27 years
Cameroon	01/01/960	ca. 1990	ca. 29 years
Cape Verde	05/07/1975	ca. 1991	ca. 28 years
Central African Rep.	13/08/1960	ca. 1993	ca. 26 years
Comoros	06/07/1975	ca. 1975	ca. 44 years
Republic of Congo	15/08/1960	ca. 1991	ca. 28 years
Cote d'Ivoire	07/08/1960	ca. 1990	ca. 29 years
Equatorial Guinea	12/10/1968	ca. 1991	ca. 28 years
Eritrea	24/05/1993	ca. 1993	ca. 26 years
Gabon	16/08/1960	ca. 1991	ca. 28 years
Ghana	06/03/1956	ca. 1992	ca. 27 years
Guinea	02/10/1958	ca. 1993	ca. 26 years
Guinea Bissau	24/09/1975	ca. 1991	ca. 28 years
Kenya	12/12/1963	ca. 1991	ca. 28 years
Lesotho	04/10/1966	ca. 1992	ca. 27 years
Liberia	26/07/1847	ca. 1985	ca. 34 years
Madagascar	26/06/1960	ca. 1975	ca. 44 years
Malawi	06/07/1964	ca. 1993	ca. 26 years
Mali	20/06/1960	ca. 1991	ca. 28 years
Mauritania	28/11/1960	ca. 1992	ca. 27 years
Mauritius	12/03/1968	ca. 1968	ca. 51 years
Mozambique	25/06/1975	ca. 1990	ca. 29 years
Namibia	21/03/1990	ca. 1990	ca. 29 years
Niger	03/08/1960	ca. 1991	ca. 28 years

Table 3.1 List of SSA Countries Included in the Sample

Country	Independence	Began Democracy	Experience with
Democracy			
Senegal	04/04/1960	ca. 1960	ca. 59 years
Sierra Leone	27/04/1961	ca. 1991	ca. 28 years
South Africa	31/05/1910	ca. 1990	ca. 29 years
Tanzania	09/12/1961	ca. 1992	ca. 27 years
Togo	27/04/1960	ca. 1992	ca. 27 years
Zambia	24/10/964	ca. 1990	ca. 29 years
Zimbabwe	18/04/1980	ca. 1980	ca. 39 years

Table 3.2 List of SSA Countries Excluded from the Sample

Country	Reason		
Chad	Affected by the exclusion criteria (has only 24 years of		
	democracy)		
DRC	Affected by the exclusion criteria (began free elections		
	in 2006)		
Ethiopia	Affected by the exclusion criteria (began the electoral		
2	process in 1995)		
Gambia	Had interrupted the electoral process in 1994		
Nigeria	Affected by the exclusion criteria (began the electoral process		
	in 1999)		
Rwanda	Affected by the exclusion criteria (began the democratic		
	process in 2003)		
Sao Tome and P.	Lack of data on social cohesion		
Seychelles	Lack of data on social cohesion		
South Sudan	Affected by the exclusion criteria (became independent		
	in 2011)		
Swaziland	Affected by the exclusion criteria (had only 10 years		
	of democracy before going back to a party-less system and		
	now to a monarchial democracy		
Uganda	Has banned multiparty democracy from 1986-2005		

3.4 Data Employed and Measurement of the Variables

The present dissertation uses secondary data from reliable sources to estimate the effect of multiparty democracy and social cohesion on human development. Bryman and Bell (2015) stated that secondary data are documents that have not been produced at the request of the researcher. In the context of this dissertation thus, the estimation of possible effects of multiparty democracy and social cohesion on the well-being of SSA populations was determined thanks to the use of panel data analysis from a cross section of 35 countries. These data, which consisted of socioeconomic development and human capital indicators of SSA countries for the years 1995-2019, were compiled from diverse sources, such as the 2020 United Nations Development report for the data pertaining to human development; the 2021 World Bank World Development Indicators for infant mortality, life expectancy, and basic drinking water; the Freedom House annual survey of civil liberties and political rights (House, 2021) and Marshall, Gurr, and Jaggers (2018) for data on democracy. The data for social cohesion came from Marshall and Elzinga-Marshall's (2020) State Fragility Index and Matrix, and the data for governance and political stability came from Kaufmann and Kraay (2020). Other data such as population growth came from the United Nations 2019 World Population Prospects (United Nations, 2020); the data for economic growth came from the 2020 World Bank national account data, and data for per capita GDP from the Bolt and van Zanden (2020) Maddison Project Database. This approach is consistent with the literature and helped to encapsulate the development of trends instead of cycles. It also ensured that the findings were of the same standard as previous empirical studies on multiparty democracy and human development.

3.4.1 Measuring the Dependent Variables

3.4.1.1 Human development Index (HDI)

Human development as a variable is described in the technical terms of the United Nations Development Program as "a process of enlarging people's choices that enable them to live a long and healthy life, to acquire knowledge and to have access to resources needed for a decent standard of living" (UNDP, 1990, p. 10). The data for this variable emanated from the 2020 human development report, which unlike the previous reports, was premised upon consistent techniques and measures that displayed real improvement in HDI values and countries' ranks over time, and the actual progress they have made (UNDP, 2020). As a composite index, human development assesses the average achievement of a country in the three broad dimensions, which are: knowledge or education attainment, a decent standard of living or income, and a long and healthy life or longevity.

The classifications of these indices are premised on established measures, which are obtained from the quartiles of distributions of human development component indices. Those fixed measures or indices are: an HDI bellow 0.550, which indicates low human development; an HDI of the interval of 0.550 and 0.699, which stands for medium human development; an HDI of 0.700 to 0.799 representing relatively high human development; and an HDI of 0.800 and above which suggests very high human development (see Appendix B). The index scores of 35 Sub-Saharan African countries and their overall variations were analyzed in order to determine whether they were the effect of multiparty democracy, social cohesion, or something else.

3.4.1.2 Infant Mortality Rate

Used as a proxy for the health dimension of the human development indicator, infant mortality rate is prominent in policy and research. Its choice and use as a measure of human development in the present study is thus consistent with the current literature. Infant mortality rate is commonly defined as the number of newborn infants in a given geographic area (a country, a state, a territory, etc.) that passed away before their first anniversary, divided by the number of live births for the same geographic area for a specified time period (usually a year) multiplied by 1,000 (number of resident infant deaths/number of resident live births, x 1,000). The data for this variable came from the 2021 World Bank's world development indicators (see Appendix C).

Technically speaking, the infant mortality rate constitutes a primary and important indicator of a country's overall health status and quality of life, since the death of newborn infants of less than a year of age reflects the effect of economic, social, and environmental conditions on the health of mothers and infants, as well as the effectiveness of health systems. The only concerns about infant mortality as a measure of human development come from the quality of the reporting of the data internationally and within countries, particularly with regards to defining a live birth and/or complete reporting of both birth and death certificates for very low birth weight babies and remote areas in Africa with no healthcare facilities.

3.4.1.3 Life Expectancy

Despite its prominence in policy and research, life expectancy is a word that is difficult to describe or define. In order to avoid vagueness, this dissertation borrowed the definition of life expectancy from the UN bodies. Hence, according to the World Populations Prospects 2019 revision (United Nations Population Division), life expectancy at birth is the tally of years that an infant would spend in life if the prevailing death rate at the moment of their birth were to remain unchanged throughout his or her life (United Nations, 2020). This definition has been echoed by many other UN agencies, such as the United Nations Statistical Division and the 2021 World Bank's World Development Indicators, where the data on life expectancy came from (see Appendix D). The score of life expectancy at birth (which assesses the health dimension of human development) is used in aggregation with that of the education dimension (measured in terms of the average number of completed school years for adults aged 25 years and older and expected years of education for children of school entering age), and the score of the standard of living dimension (measured by gross national income per capita) in order to obtain a composite index called the HDI.

Life expectancy is usually calculated using (abridged) life tables, which present age-specific mortality rates. As for life expectancy tables, they are tabulated based on death probabilities in accordance with Farr's death rate method, summarized as: qx = Mx / (Bx + (Mx/2)) where Mx = the number of deaths at the age of x to under x+1 years in the reported period; Bx = average population aged x to under x+1 in the base period; qx = death probability from age x to x+1.

3.4.1.4 Basic Drinking Water

BASW, basic drinking water, is another proxy of the health dimension of human development indicator used in the present study. Basic drinking water here means drinking water that is readily available free from contamination that can be used for personal hygiene, domestic usage (such as drinking and cooking), recreational purposes, or food production. The UN general assembly has unanimously recognized in 2010 the human right to basic drinking water and sanity. It was then understood that basic drinking water services are so elementary that everyone should have the right to physically access and afford them. Yet, a look at the raw data on this variable indicates that some entities in Sub-Saharan Africa are still far from that objective, with less than a 50% basic water supply. This also means that SSA countries have failed to reach the sustainable development goal target of 6.1, which calls for a universal and dispassionate supply and access to potable water. The aforementioned target is traced thanks to the "safely managed drinking water services" indicator (World Health Organization (WHO), 2021). Data for the basic drinking water services variable came from the 2021 World Bank's World Development Indicators (see Appendix E). It is measured in terms of the percentage of people using at least basic drinking water services.

Basic drinking water supply and access, and better handling of water resources in general, can uplift a country's economic growth as it greatly contributes to poverty reduction. Further, when water emanates from an improved and more affordable source, people will spend less time and effort to physically collect it, which implies that they can be effectual in other ways. This can also bring forth substantial personal welfare by decreasing the obligation to make lengthy or hazardous journeys to fetch water. Clean and safe water services also mean less disbursement on health, as citizens are less likely to get sick and sustain unnecessary medical expenses. They are more than capable of remaining economically dynamic as well. With children extremely exposed to water-related diseases, accessibility to improved water services can yield better health and therefore better school attendance, with optimistic longerterm repercussions on their lives (World Health Organization (WHO), 2021).

3.4.2 Measuring the Independent Variables

3.4.2.1 Multiparty Democracy (Democ1 & 2)

Measured in terms of democracy score or index, multiparty democracy is defined as a governance system in which different parties across the political circle run for national election with an equal chance to gain control of government offices, individually or in coalition. The data for democracy 1 emanated from the Freedom House report 2021, which encompasses the rankings from Freedom in the World 2015 to that of 2021 surveys. The average of each pair of scores on civil liberties and political rights defines a country's overall status of "Free" for scores ranging between 1.0 and 2.5, "Partially Free" for those ranging between 3.0 and 5.0, or "Not Free" for the range between 5.5 and 7.0 (see Appendix F). Only "free countries" are considered as "electoral and liberal democracies." The "partly free countries" in contrast are regarded as "electoral" but not "liberal democracies." According to Freedom House typologies of democratic systems, to be considered as an "electoral democracy" a territory or country ought to satisfy the ensuing criteria: (1) having a pluralistic, competitive political model; (2) allowing all adult citizens with no criminal convictions to vote; (3) having regular elections organized under reasonable conditions and without massive voter fraud that may discredit the end results; and (4) allowing all major political parties to have equal and meaningful access to the electorate and through the public media.

As for multiparty democracy 2 (democ2), the data for this variable emanated from Marshall and Gurr's 2018 Polity 5 project, one of the most preponderant sources used in political science research (see Appendix G). Data robustness and the desire to be consistent with the literature obliged the researcher to use more than one measure for the multiparty democracy variable.

According to the Polity 5 typologies of democracy, an institutional democracy is perceived as consisting of three fundamental, interconnected constituents: the presence of institutions and mechanisms through which citizens freely express their preferences about alternative policies and leaders; the presence of institutionalized restrictions on executive power; and the assurance of civil liberties to all citizens in their everyday lives and in the exercise of their right of political participation. As for the other aspects of plural or say multiparty democracy, such as freedom of the press, the systems of checks and balances, the rule of law, and so on, they are steps toward the accomplishment of those broad principles. The Polity 5 data series provides meticulous annual data on the standard of democracy for most independent countries and territories with 500,000 more than a total population and in the years that spanned from 1800 to 2018. Polity's reports

about a country's level of democracy hinges on assessments of that country's elections for competitiveness and openness, the extent of constraints on executive authority, and the nature of political participation as a whole. For each country and each year, a "Polity Score" is deduced and ranges from -10 to +10. While -10 to -6 correspond to autocracies, -5 to 5 and 6 to 10 correspond respectively to anocracies and democracies.

3.4.2.2 Political Rights

Political rights and civil liberties are dimensions of the democracy variable or indicator. The need to diversify the measures of multiparty democracy and to widen the chances of finding possible relations with human development encouraged the researcher to consider these components of democracy as variables of their own. Political rights are in simple terms the right to political participation, and the right to participle in the civil and political life of one's country. They are conferred to citizens by the constitution. By political participation the following is meant: the freedom of association; the right to join a political party; the right to stand as a candidate in an election; the right to cast one's vote; and the right to participate in a demonstration. In other words, political rights give citizens the power to take part directly or indirectly in the administration of their own countries. The data for this variable came from the Freedom House report 2021 (see Appendix H).

Political rights are part of human rights that delineate the minimal standards necessary for humans to live with decency. They confer on people the freedom to choose how they live, how they communicate their thoughts, and what kind of government they want, among many other things. The score of political rights awards a country 0 to 4 points for every 10 political rights indicators that appear in the form of questions. A score of 0 constitutes the lowest degree of freedom and 4 the highest. The questions pertaining to political rights indicators are classified into three categories: "Electoral Process" (with three questions), "Political Pluralism and Participation" (with four questions), and "Functioning of Government" (with three questions). The maxim total score that can be attributed to political rights is 40 (that is, a score of 4 for every ten questions).

3.4.2.3 Civil Liberties

The other component of democracy and a variable of its own is "civil liberties." These are natural rights that are inherent to each person and guaranteed by the constitution. In general, civil liberties are envisioned as being limitations of the executive power, which are meant to safeguard freedoms that governments may want one day to infringe upon. The data for this variable were derived from the Freedom House report 2021 (see Appendix I). The score of civil liberties awards a country or territory 0 to 4 points for every 15 civil liberties indicators, which appear in the form of questions. A score of 0 constitutes the lowest degree of freedom and 4 the highest. The questions pertaining to civil liberties' indicators are classified into four distinct classes, which are: "Freedom of Expression and Belief" (with four questions); "Associational and Organizational Rights' (with three questions); the "Rule of Law" (with four questions); and "Personal Autonomy and Individual Rights" (with four questions). The maxim overall score that can be granted for the civil liberties does not exceed 60 (that is a score of 4 for every 15 questions). The sum of the overall score awarded to political rights and that of civil liberties, after being equally weighted, accords the status of "free," "partly free," or "not free" (the overall democracy score of a country or territory).

3.4.2.4 Social Cohesion

Social cohesion is defined by Easterly et al. (2006) as the sum, the substance, and the breadth of socioeconomic cleavages within a society. While there is no problem or say no major objection to this definition, finding a complete measure of the concept of social cohesion is quite a different issue. So far, there are few data about social cohesion. For instance, the United Nations Development program's social cohesion and reconciliation (UNDP SCORE, 2020) index can provide data for merely 3 Sub-Saharan African countries and for a limited time series. Hence, for Liberia, one of the three countries for which data are accessible, these data are only for the years 2016 and 2018. For South Sudan and the Ivory Coast, the remaining two countries, data are available for the sole year of 2020.

The dearth of data for social cohesion obliges one to take into consideration estimates from both direct and indirect proxies of the variable, but even in so doing, the scarcity of data prevailed. For instance, the World Values Survey 2020 report can only provide very limited time series and incomplete data for a handful countries (Burkina Faso, Ethiopia, Ghana, Mali, Rwanda, South Africa, and Zambia). Another data source called Our World in Data has estimates for a much bigger number of countries (10 in total), but again the limited time series and number of countries concerned with the data do not deserve better consideration. It was then necessary to consider a proxy of social cohesion that could provide abundant data over a longer time period. Hence, data for the social cohesion variable were derived from the Center for Systemic Peace 2020 report on the state fragility index and matrix (Marshall & Elzinga-Marshall, 2020). The scores or indices of state fragility of Sub-Saharan countries were used as social cohesion estimates (see Appendix J). The state fragility index fits the context of this study as it measures states' vulnerability to conflict or collapse, the total residual war within a country, as well the country's general security effectiveness. The greater the fragility score, the lower is the level of cohesion in a society. The state fragility index also is a key indicator of human development. It was for such a reason that the international community has declared state fragility as one of the most important obstacles to human development.

In substance, the fragility matrix assesses every country and territory on both legitimacy and effectiveness in four performance dimensions: Security, Political, Economic, and Social. All of the indicators within this matrix are rated on a four-point fragility scale, with 0 indicating no fragility, 1 standing for low fragility, 2 suggesting medium fragility, and 3 symbolizing high fragility, except for the "Economic Effectiveness" indicator, which is weighted on a five-point fragility scale (inclusive of 4, which suggests extreme fragility). The state fragility index then merges the scores of the eight indicators and ranges the total from 0, which means "no fragility," to 25, denoting "extreme fragility." The fragility of a country or territory is closely related to its ability to handle conflicts, to implement policies, and to provide basic services. A country's fragility is also associated with their structural resilience in sustaining system coherence, cohesion, and quality of life while responding successfully to challenges and crises and maintaining a steady development pace.

3.4.3 Measuring the Control Variables

3.4.3.1 GDP per Capita

Per capita GDP is another dimension of HDI used as a variable in the present dissertation to diversify the measures of human development in a bid to increase the chances of finding the possible effects of multiparty democracy on human development. It is worth noting here that previous empirical studies have found that democracy has little to no effect on human development.

Broadly speaking, a country's per capita gross domestic product, abbreviated GDP per capita, is a measure of that country's economic output which accounts for its number of people. In simple terms, it is the country's gross domestic product divided by its total population. In fact, the GDP per capita functions as a barometer for deducing a country's economic output or income share for each person. Very often, rich countries with smaller populations find themselves with the highest per capita GDP because the wealth is shared among fewer people, which elevates individual GDP shares. The data for this variable came from the 2020 Madison project database (see Appendix K). The measure of per capita GDP, which determines the score of the standard of living dimension of human development, is aggregated with the measure and score of the education dimension and that of health to form a composite indicator of human development, called HDI. In sum, the fact that per capita GDP divides a country's gross domestic product or output by the total number of its population makes it a good measure of a country's standard of living, and thus a cogent measure of human development since it captures the level of a country's prosperity and how its citizens feel about it. Yet, because some Sub-Saharan countries are so prosperous in terms of per capita GDP and standard of life compared to others, this variable was controlled for.

3.4.3.2 Institutional Quality

The concept of quality institutions captures laws, individual rights, and the quality of government regulations and services. The data for this variable came from the WGI, the World Bank's Worldwide Governance Indicators 2020 report (see Appendix L). In the absence of a composite index, government effectiveness scores were used as a proxy indicator to determine the effect of multiparty democracy and social cohesion on human development. Remember that in both theories that were tested in this study, multiparty democracy was supposed to lead to human development through quality institutions, in concert with social cohesion (in Easterly et al.'s theory) and without the help of social cohesion in most theories in the first generation of the literature on multiparty democracy and development.

Government effectiveness assesses both the quality of public and civil services and the degree of their freedom with regard to political constraints. It also measures the standard of public policies as well as their formulation and implementation, and how committed and credible are governments in pursuing such policies. The estimates of government effectiveness give each country a score of governance on the basis of a body of indicators measured in units of a standard normal distribution that ranges from -2.5 to 2.5. The government effectiveness index may not allow for the specification of the problems of a country or for the analysis of particular solutions, but it is useful for comparing countries on a general basis in order to measure their improvement or to ascertain trends. This variable was controlled in order to avoid bias in the research findings.

3.4.3.3 Population Growth

Population or demographic growth is the increment in the number of people within a given population over time. The data for this variable came from the United Nations Population Division, World Population Prospects 2019 (see appendix M). The Sub-Saharan Africa region has witnessed a sharp increase in the size of its population for some time now, with some countries' populations increasing faster than others. The fear that high population numbers put considerable strain on countries' human development oblige controlling for this variable. The growth rate of a population is measured with respect to the tally of individuals by which the population augmented divided by the amount of time during which the augmentation has taken place.

3.4.3.4 Political Stability and No Violence

Political stability pertains to the durability of a given regime or government. Stability is determined by the amount or level of violence and other social unrest that occurs in a country. Hence, a stable society is one that is satisfied with the sitting government and its system of operations and does not indulge in revolutionary actions. The data for this variable emanated from WGI, the World Bank's Worldwide Governance Indicators 2020 report. The estimates of political stability give each country's score of stability on the basis of indicators measured in units of a standard normal distribution that range from -2.5 to 2.5 (see Appendix N). Yet, because Sub-Saharan African countries are of different levels of political stability, this variable was controlled for.

3.5 Data Analysis

Data analysis is an important step in a research study where the collected data are placed in a comprehensible order that provides researchers with a deeper understanding of the phenomenon of interest. This investigation used panel data technique to address the research purpose, consisting in finding out whether multiparty democracy and social cohesion have some effects on human development. Panel data refer to the merging of cross-sectional and time-series data into one pluridimensional dataset. Some key features of panel data comprise the number of observations (*n*) about the individuals or entities (ranging from i = 1,...,n) observed over the same lapse of time and intervals, with *T* designating the times at which the data set were observed. Yet, the data on some of the variables used in this analysis are incomplete for some countries and time periods, making these panel data unbalanced. In order to attend to this problem, a special software was used to avoid interpolating or extrapolating the data and possibly bias the results.

To control for the specific characteristics then, four estimation techniques were used: panel ordinary least squares (OLS), panel random-effects (RE), panel fixed-effects (FE), and an instrumental variable in the system generalized methods of moments (system-GMM) estimation. The aforementioned panel data estimations were most appropriate for this study for several reasons. First, they helped to explain how multiparty democracy and the social cohesion variables within each Sub-Saharan country affect human development over time, and by so doing, they allow for the heterogeneity and individuality of each country with respect to the relationship between the dependent and independent variables. Second, with the combination of cross-section and time series observations, these panel data estimations allowed for additional information, greater variability, less collinearity, greater degrees of freedom, and thus more efficiency. Third, they permitted the detection and measurement of the effects of unobserved country specific effects and therefore reduced the bias in the estimated coefficients.

In sum, it is worth bearing in mind that, when there are serious endogeneity and serial correlation issues, ordinary least squares estimations may lead to incorrect results. Similarly, any bid to ignore time or country-specific unobserved effects that exist among countries in conventional cross-sectional and times-series studies may lead to a bias. Therefore, a random effects estimation followed by its fixed-effects counterpart were used to control for the unobserved country-specific heterogeneities and time-invariant aspects. Yet, because both techniques are unable to consistently solve the problems of endogeneity or reverse causality, the system GMM estimation technique was used to deal with the endogeneity issue, which is likely to persist even with the use of OLS, and random and fixed effect estimations. System GMM was chosen and utilized because of its use of internal instruments (oftentimes a dependent variable) as parts of the independent variables (Arellano & Bond, 1991). Its consistency was assessed through the Hansen test of over-identifying restrictions for the overall validity of the instruments and the test for the null hypothesis. In situations where one fails to reject the absence of the second-order serial correlation in the disturbances, it lends support to the model (Arellano & Bond, 1991; Arellano & Bover, 1995; Blundell & Bond, 1998). In sum, the difficulty of looking for valid instrumental variables has been reduced with the use of the system GMM estimation, which uses lagged values of dependent variables as part of the independent variables to address endogeneity issues.

3.6 Ethical Considerations

Regarding the methodology of a research study, most of the concerns to be considered arise in the process of data collection and analysis, that is, between the researcher and the participants. This study used secondary data and therefore no participants were involved and no measures needed to be taken to prevent them from harm. Yet, the researcher made sure to use only trusted online sources and databases to subtract the needed data for the research purposes and objectives.
CHAPTER 4

RESULTS

This chapter presents the empirical findings of the study and their analysis. The results are organized and presented in accordance with research objective (2), to determine the effect of multiparty democracy on human development, research objective (3), to determine the effect of social cohesion on human development, and research objective (4), to determine the effect of the interaction between multiparty democracy and social cohesion on human development.

4.1 Descriptive Statistics

Descriptive statistics are part of diagnostic checks made by researchers to ensure that the data meet the various statistical assumptions such as normality, linearity, multicollinearity, serial correlation, or heteroscedasticity. It is worth noting that while these challenges are present in the data, the results turn out to be valid. Three techniques were utilized to ensure that the data met all of the assumptions of the regression analysis. First, measures of central tendency were used-mean, standard deviation, minimum, and maximum-in order to probe the normality and linearity of the dataset. Secondly, correlation matrix was used to check whether the variables were strongly correlated. Thirdly, Breush-Pagan/Cook-Weisberg and Wooldridge tests were carried out to look at issues concerning heteroscedasticity and serial correlation. It should be noted that while the measures of central tendency and the correlation matrix were conducted before the regression analyses were performed, the aforementioned tests (Breush-Pagan/Cook-Weisberg test and Wooldridge test) were accomplished in the course of the analysis. For the remainder, the sample of the study was a convenient one of 35 countries in sub-Saharan Africa. Though data were missing for some countries and time periods, no linear interpolation or data extrapolation technique was performed to fill the gaps in the missing data.

According to Table 4.1 below, it is easy to note that the human development index showed a mean of .483 and a standard deviation of .108. In addition, a cursory look at the raw data indicated that the Niger Republic recorded a minimum human development index (HDI) of .24 while Mauritius had a maximum of .804. Multiparty democracy indices Democ1 and Democ2 respectively from Freedom House and Polity 5 recorded the means of 4.047 and 4.385 for the standard deviations of 1.595 and 3.33 respectively for the 35 countries sampled. Social cohesion recorded the mean of 14.07 and standard deviation of 4.862. Institutional quality showed the mean of - .721 for a standard deviation of .624, and economic growth recorded the mean of 4.41% and a deviation of 7.674%.

Variable	Obs	Mean	Std.Dev.	Min	Max
HDI	822	.483	.108	.24	.804
Democ1	875	4.047	1.595	1	7
SC	840	14.07	4.862	0-5	24
IQ	735	721	.624	-1.88	1.06
GDPGR	861	4.41	7.674	-36.39	149.97
PGR	867	2.473	.951	64	7.9
PS	735	381	.794	-2.7	1.22
Coastal	875	.714	.452	0	1
PR	875	4.106	1.847	1	7
CL	875	3.985	1.436	1	7
Democ2	841	4.385	3.33	0	10
BASW	628	63.065	15.223	19.89	99.86
LR	825	4.616	2.108	.9	10.2
GDPPC	840	4120.237	6317.462	378	47562
IMR	875	65.389	27.56	12.5	164
LEXP	840	56.217	6.934	37.08	74.51
Democ1SC	840	61.729	35.504	0	168
Democ2SC	840	52.698	42.283	0	161

Table 4.1 Descriptive Statistics for 35 countries in Sub-Saharan Africa

Source: Author's computation

Population growth, a control variable, showed the mean of 2.473 for a dispersion of .951%, while political stability and coastal, two other control variables, recorded respectively the means of -3.81 and .714 for the standard deviations of .794 and .452. An overview of the proxies of human development-literacy rate, GDP per capita, infant mortality, life expectancy, and basic drinking water-showed respectively the mean of 4.616%, 4120.237, 65.389, 56.217, and 63.065% for the dispersions of 2.108%, 6317.462, 27.56, 6.934, and 15.223. As for the proxies or subcomponents of multiparty democracy-civil liberties and political rights, they showed the figures of 4.106 and 3.985 for the dispersions of 1.847 and 1.436 respectively. It is worth pointing out here that for multiparty democracy 1 and 2 and their components, Cape Verde and Mauritius recorded the highest or maximum scores of 1 (highest score for Freedom House) and 10 (highest score for Polity 5), while Equatorial Guinea and Eritrea recorded the lowest or minimum scores of 7 (for Freedom House) and 0 (for Polity 5). As far as the proxies of human development are concerned, the Niger republic recorded .9, at the lowest literacy rate or the minimum score, and South Africa showed a figure of 10.2 for the maximum. For life expectancy, Mauritius recorded the highest or maximum score of 74.51 and Sierra Leone scored the lowest and minimum index of 37.08. Regarding infant mortality, Mauritius recorded the lowest rate at 12.5, and Liberia recorded the highest or maximum rate or index. For per capita GDP, Equatorial Guinea recorded the maximum index of 47562 and Liberia scored the minimum index of 378. With regards to the variable of basic drinking water, a proxy of human development, it should be noted that, although its periodicity was from 2000 to 2017, the available data gave us a clear indication of the best performing countries. Hence, Mauritius was shown to possess the maximum score of 99.86% and Mozambique recorded the lowest or minimum of 19.89%. Finally, as far as the interaction between multiparty democracy and social cohesion is concerned, there were two measures representing respectively the interaction between multiparty democracy 1 with social cohesion (Democ1SC), and then the interaction between multiparty democracy 2 and social cohesion (Democ2SC). The two variables scored the means of 61.729 and 52.698 respectively for the standard deviations of 35.504 and 42.283.

It is important to stress here that the standard deviation or dispersion provides information on the extent to which a particular variable has deviated or say, has moved far away from the mean. Therefore, the distance or difference between the mean and the standard deviation can be used to detect the presence of an outlier or the normality of the dataset. In this respect, the descriptive statistics showed the possibility of the presence of outliers with regards to a few variables such as infant mortality: mean (65.389) and the standard deviation (27.56), life expectancy: mean (56.217) and a dispersion of (6.934), and basic drinking water: mean (63.065) and the low dispersion of (15.223). In brief, it is somehow the whole variable of interest "human development" that showed a gap between the mean (.483) and the standard deviation (.108). This indicates that some countries are performing greater than others on that variable. Luckily, thanks to the large data observation of 822, the presence of outliers did not significantly violate the normality assumption.

4.2 Matrix of Correlation

Besides descriptive statistics, another critical assumption for doing regression analysis either in cross-section, time series, or panel data is to scrutinize the variables for multicollinearity. The objective of this diagnostic check is to assure that the variables are not highly correlated among themselves. In order to reach this objective, a correlation matrix was used despite the lack of consensus in the literature with respect to the size of the correlation coefficient. While Pallant (2013). advocates a correlation coefficient of not more than 0.7, other scholars, including Babbie (2015), suggest that the coefficient should not exceed the measures of 0.8 and 0.9. It was ensured that the variables that were highly correlated (above 0.90) were estimated in separate models.

In Table 4.2 below, the correlation matrix revealed that, with the exception of the association between multiparty democracy 1 (Democ1) and its components— political rights (PR) and civil liberties (CL), which recorded respectively the correlation of 0.97 and 0.96, or the correlation between political rights and civil liberties (0.89), the relation between multiparty democracy 1 and 2 (-0.82), and the correlation between political rights and multiparty democracy 2 (-0.84)—all of the

remaining constructs recorded the correlation coefficients of less than 0.8. More interestingly, the association between the measures of multiparty democracy (Democ1, PR, CL, Democ2) and the human development indicator is statistically significant with relatively weak coefficients respectively (-0.31, -0.28, -0.32, and 0.32). Further, the correlation between the same aforementioned democracy measures and the proxies of human development (BASW, LR, PGDPC, IMR, and LEXP) is significant and showed the possibility of a relationship between them. Social cohesion also showed a significant relation with human development with a -0.79 coefficient.

As stated earlier in the literature review, two sources of data were used to measure the level of democracy in each Sub-Saharan African country. These sources were the Freedom House and the Polity 5 project. It is important to note that whereas Freedom House combines and equally weights the overall score awarded for political rights and the overall score awarded for civil liberties to determine the democracy score of a country or territory, the Polity 5 project uses the democracy index obtained using a different process. In Table 4.2 below, it is clearly shown that the correlation between multiparty democracy1 and political rights on the one hand and on the other hand the relationship between multiparty democracy 1 and civil liberties are respectively very high: 0.97 and 0.96. In order to deal with the issue of multicollinearity among these variables, they were separated in the estimation models.

Dem ocSC																	1.000
lexp																1.000	-0.452
imr															1.000	-0.751	0.569
gdppc														1.000	-0.216	0.231	-0.162
Ч													1.000	0.454	-0.610	0.280	-0.380
bsw												1.000	0.541	0.353	-0.592	0.486	-0.478
dem2											1.000	0.407	0.215	-0.063	-0.391	0.327	-0.755
cl										1.000	-0.740	-0.373	-0.186	0.089	0.409	-0.331	0.893
pr									1.000	0.892	-0.846	-0.372	-0.187	0.094	0.369	-0.296	0.878
0								1.000	-0.006	-0.034	-0.078	0.152	0.131	0.193	-0.113	0.370	-0.118
sd							1.000	760.0	-0.579	-0.616	0.444	0.362	0.382	0.360	-0.444	0.342	-0.749
pgr						1.000	-0.177	0.127	0.363	0.334	-0.352	-0.507	-0.414	0.097	0.337	-0.044	0.305
gdpgr					1.000	0.223	0.162	0.060	-0.142	-0.145	0.110	-0.106	-0.045	0.047	0.065	0.014	-0.154
pi	2			1.000	0.056	-0.450	0.633	0.016	-0.699	-0.750	0.566	0.458	0.463	0.162	-0.596	0.368	-0.755
S			1.000	-0.727	-0.051	0.409	-0.726	-0.199	0.584	0.635	-0.531	-0.642	-0.605	-0.445	0.758	-0.602	0.843
dem 1		1.000	0.624	-0.742	-0.147	0.359	-0.614	-0.021	0.979	0.965	-0.822	-0.383	-0.193	0.093	0.398	-0.321	0.910
hdi	1.000	-0.316	-0.798	0.545	600.0	-0.320	0.530	0.361	-0.289	-0.326	0.321	0.736	0.826	0.589	-0.749	0.664	-0.536
Variables	IDH	Democ1	SC	Ŋ	GDPGR	PGR	PS	CO	PR	cr	Democ2	BASW	LR	GDPPC	IMR	LEXP	democSC

Table 4.2 Correlation Matrix

Subsequent to the diagnostic checks that pertain to descriptive statistics and the correlation matrix, Breush-Pagan/Cook-Weisberg and Wooldridge tests were performed in order to check for issues concerning heteroscedasticity and serial correlation. It is worth recalling however that while the measures of central tendency and the correlation matrix analysis were carried out before the regression analyses were performed, the Breush-Pagan/Cook-Weisberg and Wooldridge tests were done in the course of those analyses. The results of the analyses that followed revealed the absence of heteroskedasticity with a p-value of more than 5% (0.2116) and the acceptance of the null hypothesis. As for the Wooldridge test, the results indicated the presence of serial correlation with a p-value of less than 5% (0.0000) and the rejection of the null hypothesis.

Table 4.3 Further Diagnostic Checks

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Breusn-Pagan/Cook-weisberg Test for Heteroskedasticity)	
Ho: Constant variance	
Variables: Fitted values of HDI	
Chi2 (1)	1.56
Prob > Chi2 =	0.2116

Source: Author's computation. Note: Reject Ho if P-value is less than 5% or 0.05 and conclude the presence of heteroskedasticity

Wooldridge Test for Auto/Serial Correlation

Ho: N first-order autocorrelation	
F (1,34)	122.876
Prob>F =	0.0000

Source: Author's computation. Note: Reject Ho if p-value is less than 5% (0.05) and conclude the presence of serial or autocorrelation

4.3 Empirical Results and Analysis

As stated earlier in chapter 3, this study used four estimation techniques to control for specific characteristics: ordinary least squares, random effects, fixed effects, and an instrumental variable in the system generalized method of moments estimations. These techniques have been used in various ways in the literature to deal with challenges regarding the heteroscedasticity, serial correlation, and endogeneity that often characterize panel data analysis. It is worth recalling that this study sought to determine the effect of multiparty democracy and social cohesion on human development. Yet, unlike other investigations on the same issue which made use of only two or three estimation techniques, the present study is unique. It is particular in the sense that it examined possible relations among multiparty democracy, social cohesion, and human development in different models and techniques. Hence, beyond the use of control variables to estimate each of the models, OLS estimation was used as the baseline model, followed by random effects, fixed effects, and system generalized method of moments estimations. While the fixed effects technique was used to control for specific characteristics that were beyond the pooled ordinary least squares capacities, the system GMM was used to deal with endogeneity issues and to ensure that the findings were robust. The analyses were conducted in accordance with the research hypotheses.

4.3.1 Effect of Multiparty Democracy on Human Development

This section examines the hypothesis or the pro-democracy theories according to which multiparty democracy exerts a positive effect on human development. To test this hypothesis across the estimations, four different measures of democracy were used, of which two came from the most popular and reliable institutions (Freedom House and Polity 5). These measures were termed Democ1 for multiparty democracy 1 and Democ2 for multiparty democracy 2. The variable "multiparty democracy 1" or Democ1 was disintegrated to its components' levels and two more measures and variables were added, political rights and civil liberties, to the analysis. The dependent variables were the human development index, the variable of interest, and three of its proxies: infant mortality, life expectancy, and basic drinking water. Other variables were added to the model as control variables in accordance with the existing literature.

Pooled OLS Estimation

The OLS results are shown in Table 4.4, 4.5, 4.6, and 4.7 below. As is customary, OLS techniques pool the cross-sections and estimate the model based on weighted least squares. These estimation techniques allow for panel heterogeneity and spatial correlation between the error terms across the sampled countries. It should be pointed out that because the measure of multiparty democracy 1 was highly correlated with political rights and civil liberties, as shown in the correlation matrix (Table 4.2), they were examined in separate models. Hence, multiparty democracy 1 was estimated in model (1), multiparty democracy 2 in model (2), but political rights and civil liberties were estimated in the same model (3) as they were still within the range of less than 0.9, Babbie's (2015) correlation criterion.

According to models (1) to (3) in Table 4.4 below, the findings show that only multiparty democracy 2 (Democ2) and civil liberties (CL) appear to be associated with human development, the first positively at 0.01 and the second variable negatively at 0.05 respectively while controlling for GDP per capita, institutional quality, population growth, and political stability. The independent variables explained 58% (R2 = 0.580) of the total variations in the dependent variable in column (1), while 59% and 58% of the total variations in the dependent variable were explained by the independent variables in models (2), (3) consecutively. In order to estimate the effect of multiparty democracy on human development, it is hinted that a 1% change in the value of multiparty democracy 2, if political stability, population growth, institutional quality, and per capita GDP are controlled for, will be associated respectively with a 0.00410 point increase in the human development index, and a 5% change in the value of civil liberties, associated with a -0.0122 point decrease in the human development index in the Sub-Saharan African region.

	(1)	(2)	(3)
VARIABLES	HDI	HDI	HDI
Democ1	-0.00265		
	(0.00280)		
Democ2		0.00410***	
		(0.000967)	
PR			0.00582
			(0.00365)
CL			-0.0122**
			(0.00481)
GDPPC	8.11e-06***	8.28e-06***	8.25e-06***
	(6.93e-07)	(6.61e-07)	(6.70e-07)
IQ	0.0450***	0.0408***	0.0414***
	(0.00795)	(0.00639)	(0.00801)
PGR	-0.0232***	-0.0213***	-0.0242***
	(0.00383)	(0.00383)	(0.00382)
PS	0.0129**	0.0108**	0.0113**
	(0.00500)	(0.00447)	(0.00498)
Constant	0.556***	0.517***	0.568***
	(0.0112)	(0.0124)	(0.0118)
Observations	667	667	667
R-squared	0.580	0.590	0.584

 Table 4.4 Dependent Variable: Human Development (OLS Estimations Results)

With reference to the control variables that were included in the models—per capita GDP, institutional quality, political stability, and population growth rate—they seemed to have a positive effect on human development with the exception of the latter (population growth), which showed a negative sign as far as its effect on human development is concerned. This is understandable since we know that, as population grows, cities will also grow and become urbanized. As a result, more pressure is likely to be added to the stressful life of the population. In addition, a huge population in cities would also mean that pollution and environmental degradation are going to increase and pose serious health problems for the inhabitants. The population growth rate in Africa is alarming; more than half of global population growth between now and 2050 is expected to occur in Africa (United Nations, 2020). Africa has one of the highest rates of population growth across the globe according to the 2019 Revision of World Population Prospects (United Nations, 2020). The population of

Nigeria, for example, has doubled in the last two decades and will double again to over 400 million by 2050 (United Nations, 2020). Additionally, a cursory look at the raw data shows that the best performing countries with regards to human development in Sub-Saharan Africa share two or three things in common: a low population growth rate, and relatively good institutional quality and GDP per capita share, which engender social and political stability. Hence, it is not surprising that the population growth rate shows a negative influence on human development, although it is unclear under what condition that negative impact would occur. Another credible reason would be that a huge population growth rate renders insufficient and more uneven government spending which in turn could affect per capita income and lead to conflicts, population dispersal, child malnutrition, and others woes. Therefore, given the limited resources in most African countries, the huge population growth would mean that progress toward human development will slow, if it ever happens.

According to models (1) to (3) in Table 4.5 below, the findings showed that multiparty democracy 2, political rights, and civil liberties appeared to be related to infant mortality. While the first and second named variables affect infant mortality negatively at 0.01 and 0.05 respectively, the third one (CL) shows a positive association with IMR at 0.05. The variables GDP per capita, institutional quality, population growth, and political stability were controlled for. The independent variables explained 36% (R2 = 0.359) of the total variations in the dependent variable in column (1), while 37% and 36% of the total variations in the dependent variable were explained by the independent variables in models (2), (3) consecutively. In order estimate the effect of multiparty democracy on infant mortality, it is hinted that a 1% change in the value of multiparty democracy2, if political stability, population growth, institutional quality, and per capita GDP are controlled for, will be associated respectively with a -1.087 point decrease in progress toward infant mortality control, and a 5% change in the value of political rights and civil liberties will be associated respectively with a -2.317 point decrease and a 2.974 point increase in progress toward infant mortality control in sub-Saharan Africa.

	(1)	(2)	(3)
VARIABLES	IMR	IMR	IMR
Democ1	-0.467		
	(0.897)		
Democ2		-1.087***	
		(0.272)	
PR			-2.317**
			(0.970)
CL			2.974**
			(1.401)
GDPPC	-0.000513***	-0.000634***	-0.000555***
	(0.000128)	(0.000117)	(0.000128)
IQ	-17.54***	-14.84***	-16.53***
	(2.228)	(1.806)	(2.288)
PGR	3.830***	3.279***	4.009***
	(1.132)	(1.177)	(1.116)
PS	-3.750**	-2.302*	-3.237**
	(1.570)	(1.361)	(1.541)
Constant	43.78***	51.33***	40.34***
	(3.304)	(3.345)	(3.337)
Observations	693	693	693
R-squared	0.359	0.371	0.365
	Pobust a	tandard arrors in pa	ronthosos

 Table 4.5 Dependent Variable: Infant Mortality (OLS Estimations)

Speaking of the control variables that were included in the models—per capita GDP, institutional quality, political stability, and population growth rate—they seemed to have a negative but significant effect on infant mortality with the exception of the latter (population growth), which showed a positive sign as far as its effect on infant mortality is concerned. This is surprising but not difficult to understand when it is clearly shown that civil liberties are the key to improvements in infant mortality rate here. When people have their voices heard, when the government cannot impede their rights, they will receive adequate and sufficient healthcare services and increased social spending. On the other hand, however, resources may abound but the government might only increase individual personal income when expending less in social sectors or leaving rural and remoted areas without healthcare facilities and services. While citizens may brag about an increase in their personal income, healthcare services will shrink and their costs will surge. In this case, population

growth rate is not a hindrance to human development; rather it can help remove some barriers regarding government restrictions. A cursory look at the raw data helps to better understand that. We can see from the raw data that all of the best performing countries with regards to infant mortality recorded high civil liberty scores but the highest GDP per capita belongs to Equatorial Guinea, which recorded a score or index of \$47562. Had civil liberties been well respected in that country, the population could have had better healthcare facilities and services and thus a better control over infant mortality.

According to models (1) to (3) in Table 4.6 below, the findings showed that multiparty democracy 1 (Democ1), multiparty democracy 2 (Democ2), and civil liberties (CL) appeared to be associated with life expectancy. While multiparty democracy 1 and civil liberties were negatively associated with life expectancy at 0.01 each, multiparty democracy 2 showed a positive relationship at 0.01 with the dependent variable (LEXP). GDP per capita, institutional quality, population growth, and political stability were controlled for. The independent variables explained 20% (R2 = 0.209) of the total variations in the dependent variable in column (1), while 23% and 21% of the total variations in the dependent variable were explained by the independent variables in models (2) and (3) respectively. In order to estimate the effect of multiparty democracy 1 and 2, and civil liberties, if political stability, population growth, institutional quality, and per capita GDP are controlled for, will be associated respectively with a -0.876, 0.526, and -1.216 point increase in life expectancy in Sub-Saharan Africa.

	(1)	(2)	(3)
VARIABLES	LEXP	LEXP	LEXP
Democ1	-0.876***		
	(0.234)		
Democ2		0.526***	
		(0.0754)	
PR			0.0673
			(0.258)
CL			-1.216***
			(0.366)
GDPPC	0.000211***	0.000197***	0.000221***
	(4.11e-05)	(3.74e-05)	(4.03e-05)
IQ	2.132***	2.263***	1.889***
	(0.648)	(0.542)	(0.660)
PGR	0.705**	0.870***	0.663**
	(0.336)	(0.332)	(0.329)
PS	0.441	0.559	0.320
	(0.396)	(0.349)	(0.392)
Constant	59.37***	53.24***	60.20***
	(1.045)	(1.016)	(1.021)
Observations	693	693	693
R-squared	0.209	0.236	0.214

 Table 4.6 Dependent Variable: Life Expectancy (OLS Estimations)

With reference to the control variables that were included in the models—per capita GDP, institutional quality, political stability, and population growth rate—they all seemed to have a positive effect on human development with the exception of political stability, which did not seem to be related to life expectations. Usually, life expectancy is said to be determined by many factors, such as individual socioeconomic status (education and economic well-being, income, employment) and the quality of the health system and people's access to it. It is therefore not surprising that institutional quality and GDP per capita were flagged out as having an effect on life expectations. It is equally not a surprise to see that population growth rate had an impact of life expectancy, although it is unclear under what condition that positive impact would occur. One clue would be that a huge population growth, when coupled with a lack of quality institutions, may affect income share whose impairment could

have a negative effect on life expectancy. Another reason could be that, as population grows, the cities and towns will become urbanized, and the more they do, the more pressure is placed on limited social amenities. Moreover, a huge population in cities would mean that pollution and environmental degradation will increase and pose serious health problems for people. To repeat myself, the best performing countries with regards to life expectancy in Sub-Saharan Africa share two or three things: a low population growth rate, relatively good institutional quality, and GDP per capita share among their population, which has a tangible effect on life expectancy. Therefore, given the limited resources in most African countries, it is imperative to foster quality institutions if we have to improve longevity in Africa.

According to models (1) to (3) in Table 4.7 below, the findings show that multiparty democracy 1 and 2 (Democ1 & Democ2) and civil liberties (CL) appeared to be associated with the dependent variable basic drinking water. However, while the relationship among multiparty democracy 1, civil liberties, and basic drinking water was negatively significant at the 1% level, the association between multiparty democracy 2 and BASW showed a positive significance at the same level (1%). The independent variables explained 47% (R2 = 0.476) of the total variations in the dependent variable in column (1), while 48% and 47% of the total variations in the dependent variable were explained by the independent variables in models (2) and (3) respectively. In order to estimate the effect of multiparty democracy on basic drinking water services, it is hinted that a 1% change in the value of multiparty democracy 1, if we control for political stability, population growth, institutional quality, and per capita GDP, will be associated respectively with a -2.841 point decrease in basic drinking water accessibility, a 1% change in the value of multiparty democracy 2 will be associated with a 1.154 point increase in basic drinking water supply, and 1% in the value of civil liberties will be associated with a -2.254 point decrease in progress toward basic drinking water services in Sub-Saharan Africa.

	(1)	(2)	(3)
VARIABLES	BASW	BASW	BASW
Democ1	-2.841***		
	(0.494)		
Democ2		1.154***	
		(0.193)	
PR			-0.862
			(0.627)
CL			-2.254***
			(0.813)
GDPPC	0.000944***	0.000856***	0.000954***
	(9.81e-05)	(8.84e-05)	(9.74e-05)
IQ	0.264	1.763	-0.0393
	(1.463)	(1.259)	(1.461)
PGR	-7.105***	-6.776***	-7.175***
	(0.642)	(0.635)	(0.642)
PS	-1.310	-0.337	-1.381
	(0.919)	(0.831)	(0.920)
Constant	87.67***	71.99***	88.53***
	(1.809)	(2.135)	(1.914)
Observations	588	588	588
R-squared	0.476	0.486	0.477

Table 4.7 Dependent Variable: Basic Drinking Water (OLS Estimations Results)

Speaking of the control variables that were included in the models—per capita GDP, institutional quality, political stability, and population growth rate—two of these variables (GPDPC and PGR) seemed to have a positive and a negative effect respectively on basic drinking water accessibility. This is not surprising when we know that the addition of basic drinking water is part of governance spending, which is primarily determined by certain social and economic factors such as urbanization and certain health concerns, but the whole issue is conditioned by the availability of resources, and thus economic growth.

Unlike GDPPC growth, population growth was flagged as a hindrance to the addition and accessibility of basic drinking water. The larger the population you have, the more water it consumes and the more government expends. Hence, it is not surprising that population growth rate showed a negative influence on basic drinking water services. Uncontrolled population growth, when coupled with a lack of quality institutions and unequal income distribution, could only hinder progress toward effectively basic water supply. Nigeria is one of the richest countries in Sub-Saharan Africa, and one that experiences the dire reality of basic water supply the most because of its huge population. Additionally, a cursory look at the raw data shows that the best performing countries with regards to basic drinking water services in Sub-Saharan Africa are those that have a low population growth rate, such as Mauritius and Cape Verde.

Random Effects Estimation

The random effects results are shown in Table 4.8, 4.9; 4.10, 4.11 below. The RE technique has the advantage of controlling for panel heterogeneity and estimating the effect of time-invariant variables even though the estimates may be biased because of lack of control over the omitted variables. It should be pointed out that because the measure of multiparty democracy 1 was highly correlated with political rights and civil liberty as indicated in the correlation matrix (Table 5.2) above (correlation greater than 0.9), they were examined in separate models in the random effects' estimation as well. Hence, multiparty democracy 1 was estimated in model (1), multiparty democracy 2 in model (2), but political rights and civil liberties were estimated in the same model (3) as they were still within the range of less than 0.9, according to Babbie's (2015) correlation criterion.

In models (1) to (3) in Table 4.8 below, the findings showed that multiparty democracy 1 and 2 (Democ1 and Democ2), and civil liberties (CL), appeared to be associated with human development. While multiparty democracy 1 and civil liberties were shown to have a negative effect on human development at 5% and 10% levels respectively, multiparty democracy 2 on the other hand appeared to be positively related with human development at the 1% level. In order to estimate the effect of multiparty democracy 0, if we control for political stability, population growth, institutional quality, and per capita GDP, will be associated with a 0.0111 point increase in the human development index, a 5% change in the value of multiparty democracy 1 will be associated with -0.0162, and 10% changes in the value of civil liberties will be associated with a -0.0126 point decrease in the human

development index in Sub-Saharan Africa. These results were similar to the OLS findings and corroborated the numerous empirical findings in the literature on multiparty democracy and human development in Sub-Saharan Africa.

	(1)	(2)	(3)
VARIABLES	HDI	HDI	HDI
Democ1	-0.0162**		
	(0.00630)		
Democ2		0.0111***	
		(0.00181)	
PR			-0.00501
			(0.00516)
CL			-0.0128*
			(0.00727)
GDPPC	9.16e-06*	8.24e-06**	9.18e-06*
	(4.80e-06)	(4.14e-06)	(4.76e-06)
IQ	-0.00625	0.00159	-0.00646
	(0.0188)	(0.0149)	(0.0190)
PGR	0.000166	-0.00309	9.31e-05
	(0.00909)	(0.00780)	(0.00928)
PS	-0.0104	-0.0117	-0.0108
	(0.0129)	(0.00977)	(0.0128)
Constant	0.503***	0.404***	0.509***
	(0.0406)	(0.0350)	(0.0417)
Observations	667	667	667
Number of countries	35	35	35

 Table 4.8 Dependent Variable: Human Development (Random-Effects Estimation)

Robust standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1

Again, speaking of the control variables that were included in the models—per capita GDP, institutional quality, political stability, and population growth rate—only per capita GDP seemed to have a positive effect on human development. This is not a surprise when we know that the more people earn, the more they are able to send their children to school, and the better is their lives. GDP per capita is widely hailed as a key factor in human development. A cursory look at the raw data has shown that the best performing countries with regards to human development in Sub-Saharan Africa have steady good per capita share among their populations. In addition, equal income distribution helps to consolidate social cohesion and to distance a society from the spectrum of conflicts and political instability. Therefore, it is important to rethink

government expending in SSA so as to adequately distribute national income and to increase people's well-being.

According to models (1) to (3) in Table 4.9 below, the findings showed that multiparty democracy 1 and 2 (Democ1 and Democ2) appeared to be associated with infant mortality (IMR). While the first named variable had a positive effect on infant mortality at the 0.1 level, the second one (Democ2) showed a negative impact on the same predicted variable at the 0.01 level. In order to estimate the effect of multiparty democracy on infant mortality, it was hinted that a 10% change in the value of multiparty democracy 1, if we control for political stability, population growth, institutional quality, and per capita GDP, will be associated respectively with a 4.012 point increase in progress toward infant mortality rate control, and a 1% change in the value of multiparty democracy 2 will be associated with a -3.545 point decrease in progress toward infant mortality rate control in Sub-Saharan Africa. This is unlike the OLS estimation results where multiparty democracy 1 (democ1) showed no association with infant mortality and multiparty democracy 2 (demon2) appeared to have a negative effect on infant mortality. Moreover, these findings would credit the pro-democracy theories even though it is unclear how multiparty democracy could ameliorate infant mortality rates in the SSA region. The only possible explanation could come from Rikker and Shayo's multidimensional theory of redistributive policy or Ross' regime type and poverty theory. In both cases multiparty democracy could impact infant mortality, all other things being equal.

	(1)	(2)	(3)
VARIABLES	IMR	IMR	IMR
Democ1	4.012*		
	(2.284)		
Democ2		-3.545***	
		(0.547)	
PR			0.993
			(1.830)
CL			3.547
			(2.422)
GDPPC	-0.00150**	-0.00138**	-0.00150**
	(0.000692)	(0.000538)	(0.000685)
IQ	3.957	3.214	4.069
	(5.315)	(4.898)	(5.350)
PGR	2.597	3.217	2.540
	(3.173)	(2.994)	(3.173)
PS	-1.752	-0.411	-1.603
	(5.169)	(4.255)	(5.146)
Constant	49.14***	79.37***	47.50***
	(13.89)	(8.242)	(13.76)
Observations	693	693	693
Number of countries	35	35	35

 Table 4.9 Dependent Variable: Infant Mortality (Random Effects Estimation)

With reference to the control variables that were included in the models—per capita GDP, institutional quality, political stability, and population growth rate—only one of them (GDPPC) appeared to have an effect on infant mortality. In fact, per capita GDP showed a positive sign as far as its effect on infant mortality is concerned. This is not surprising when we all know the advantages of having a good per capita income share. A cursory look at the raw data helps to better understand that fact. We can see from the raw data that all of the best performing countries with regards to infant mortality recorded a steady share of per capita GDP among their population with the exception of Equatorial Guinea, which recorded the highest but uneven scores of per capita GDP.

According to models (1) to (3) in Table 4.10 below, the findings showed that only multiparty democracy 2 (Democ2) out of the four explanatory variables appeared to be associated with life expectancy while controlling for GDP per capita, institutional quality, population growth, and political stability. In order to interpret the effect of multiparty democracy on life expectancy, it was hinted that a 1% change in the value of multiparty democracy 2 will be associated respectively with a 0.982 point increase in life expectancy in sub-Saharan Africa.

	(1)	(2)	(3)
VARIABLES	LEXP	LEXP	LEXP
Democ1	-0.926		C_{-}
	(0.615)		
Democ2		0.982***	
		(0.168)	
PR		, ,	-0.306
			(0.478)
CL			-0.696
			(0.668)
GDPPC	0.000423	0.000387	0.000423
	(0.000300)	(0.000257)	(0.000299)
IO	-1.136	-0.870	-1.142
	(1.553)	(1.304)	(1.566)
PGR	0.417	0.208	0.424
	(0.875)	(0.777)	(0.876)
PS	0.128	-0.346	0.109
	(1.255)	(0.997)	(1.258)
	(1.255)	(0.5577)	(1.250)
Constant	56.96***	49.43***	57.20***
	(3.716)	(2.799)	(3.776)
Observations	693	693	693
Number of countries	35	35	35

Table 4.10 Dependent Variable: Life Expectancy (Random Effects Estimation)

Robust standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1

Again, speaking of the control variables that were included in the models—per capita GDP, institutional quality, political stability, and population growth rate—none of these variables showed a positive or negative relation with life expectations. This is unusual especially when we know that life expectancy is determined by factors such as individual socioeconomic status (education and economic well-being, income, employment) and the quality of the health system and people's access to it, and thus by institutional quality and GDP per capita which are said to have positive effects on life expectations.

In models (1) to (3) in Table 4.11 below, the findings showed that only multiparty democracy 2 (Democ2) out of the four explanatory variables appeared to be associated with basic drinking water, the predicted variable, at the 0.1 level. In order to estimate the effect of multiparty democracy on basic drinking water services, it was hinted that a 10% change in the value of multiparty democracy 2, if political stability, population growth, institutional quality, and per capita GDP are controlled for, will be associated respectively with a 0.624 point increase toward basic drinking water services in Sub-Saharan Africa.

	(1)	(2)	(3)
VARIABLES	BASW	BASW	BASW
Democ1	-0.949	M	
	(0.989)		
Democ2		0.624*	
		(0.337)	
PR			0.333
			(0.716)
CL			-1.752
			(1.107)
GDPPC	0.000822**	0.000772**	0.000833**
	(0.000415)	(0.000374)	(0.000407)
IQ	-3.655	-3.182	-3.839
-	(2.747)	(2.687)	(2.719)
PGR	-1.599	-1.801	-1.633
	(1.162)	(1.193)	(1.143)
PS	-1.648	-1.780	-1.650
	(1.744)	(1.753)	(1.732)
Constant	64.05***	58.37***	65.66***
	(5.300)	(4.982)	(5.446)
Observations	588	588	588
Number of countries	35	35	35

Table 4.11 Dependent Variable is Basic Drinking Water (Random Effects Estimation)

Robust standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1

With reference to the control variables that were included in the models—per capita GDP, institutional quality, political stability, and population growth rate—only GDP per capita appeared to be related to the addition of basic drink water. In fact, per capita GDP seemed to have a positive impact on basic drinking water. This is not surprising when we know all the advantages of having a good per capita income

share. People may not wait for the government to deliver when they can afford the services themselves. This can be seen in the increased sale and consumption of distilled and other so-called pure or purified water throughout the African continent.

Fixed Effects (FE) Estimation

As mentioned in chapter 4, the ordinary least square method does not take into account unobserved country-specific heterogeneities such as structural characteristics, time-invariant shocks, and historical differences. Rather, the OLS method treats all countries as a single entity. Therefore, the random effects technique was introduced in order to control for these heterogeneities and to estimate the effect of the timeinvariant variables. However, because the random effects estimates may be biased in terms of lack of control over the omitted variables, the fixed effects technique was finally employed in order to circumvent these weaknesses and to control for countryspecific issues by assuring that each country has its own intercept. The unobserved structural features or historical dissimilarities that could be overlooked are factors such as colonial legacy, the role or impact of religion on the secular institutions, and certain cultural demeanors regarding both state institutions and the environment or other human beings.

In table 4.12 below, the results are so stunning. After controlling for countryspecific heterogeneities, it was surprising to see that the same variables (multiparty democracy 1 and 2) showed the same relationship with human development as they did in the random effects in the same models (1 and 2) and at the same significance levels—0.05 and 0.01 respectively. Statistically speaking, the fact that these two measures of democracy, based on different methodologies, yielded very similar results strengthens the confidence in the robustness of their capacity to capture the essence of multiparty democracy. On the theoretical level, these results confirmed both the pro-democracy theories' apparent truth concerning the effect of multiparty democracy on human development and their rejection by recent empirical studies on the subject. Multiparty democracy 1 (Democ1) was negatively correlated with human development in both the random and fixed effects estimation with a coefficient of -0.0162 and -0.0147 at 0.05 level respectively, while multiparty democracy 2 (Democ2) showed a positive effect on human development at the 0.01 level with respectively a coefficient of 0.0111 and 0.110. This means that a 5% change in the value of multiparty democracy is likely to be associated with a -0.0162 and -0.0147 point decrease in human development index respectively in the random and fixed effects models; and a unit change in the value of multiparty democracy will be associated with a 0.0111 and 0.0110 point increase in the human development index in both random and fixed effects model estimations. The immediate implications of these findings corroborated Gerring et al.'s (2012) study in which they found that a country's contemporary level of democracy has only a weak association with improved human development while its historical experience with democracy has a strong and robust influence on human development. In brief, these scholars came to the conclusion that democracy does ameliorate human development if and only if it is considered as a historical or "stock" phenomenon. In simple terms, this implies that if a democratic system of governance is upheld over a longer period of time, its net effect will be resolute for the welfare of its citizens. Given the periodicity of the data which began in 1995, that is 3 to 4 years only after the democratization of most countries in SSA, and also the fact that multiparty democracy is relatively new in Africa, it can only have little to no effect on the well-being of the population in SSA.

	(1)	(2)	(3)
VARIABLES	HDI	HDI	HDI
Democ1	-0.0147** (0.00669)		
Democ2		0.0110***	
PR		(0.00187)	-0.00512
CL			-0.0107 (0.00743)
GDPPC	8.82e-06 (5.23e-06)	7.74e-06* (4.48e-06)	8.83e-06* (5.20e-06)
IQ	-0.0198 (0.0188)	-0.00855 (0.0158)	-0.0194 (0.0189)
PGR	0.00572 (0.0102)	0.000285 (0.00855)	0.00556 (0.0104)
PS	-0.0113 (0.0132)	-0.0129 (0.0101)	-0.0115 (0.0132)

Table 4.12 Dependent Variable: Human Development (Fixed Effects Estimations)

	(1)	(2)	(3)
VARIABLES	HDI	HDI	HDI
Constant	0.475***	0.391***	0.480***
	(0.0411)	(0.0334)	(0.0432)
Observations	667	667	667
R-squared	0.182	0.309	0.182
Number of c_id	35	35	35

The findings further indicated that GDP per capita, a control variable, had a positive impact on human development in models (2) and (3). It is worth noting here that the focus of the argumentation of the pro-democracy theories is about the consolidation of per capita GDP through redistribution. For many scholars, including Aristotle, Madison, and some present-day political economists, it is undeniable that democracy serves as a mechanism for redistribution, and thus for human development (Meltzer & Richard, 1981). Hence, for these pro-democracy scholars, democracy would bring about higher government social spending, which in turn would improve the welfare of the poor and influence human development. However, for their opponents, "even if one brackets the question of economic growth (thereby assuming that regime type is growth neutral), the case for democracy as a welfare-enhancing mechanism appears shaky" (Gerring et al., 2012, p. 2).

In Table 4.13 below, the findings are somehow similar to that of the random effect estimation. After controlling for country-specific heterogeneities, multiparty democracy 2 still showed a negative association with infant mortality at the 0.01 level. The forecast of the results suggested that for a unit of change in the value of multiparty democracy 2, there is likely to be a -3.622 point decrease in the struggle toward improvement in infant mortality. These findings are still in line with the current literature as explained in the previous Table (5.12) and with the random effects estimation results as well. In fact, owing to in-depth exploration and a series of regression checks with the child mortality rate as the core measure of human development alongside two hypotheses (the first, replicating the traditional causal linkage between the child mortality rate of a country and its democratic achievements in the previous year; and the second, measuring democracy with a "stock" indicator that captures the history of a country's government system from 1900 to the year of

observation), Gerring, *et al.* (2012) finds that multiparty democracy has a long-term effect on human development marked by an indirect rather than direct causal relationship. According to these authors, multiparty democracy ameliorates human development only in case it is considered a historical or "stock" phenomenon. This implies that if a democratic system of governance is upheld over a long while in a country, its direct effect will be resolute for the welfare of its citizens (*Gerring et al.*, 2012). However, this is not the case with SSA Africa, which has a relatively new democracy, which is a form of government that has not been upheld for long in most countries.

	(1)	(2)	(3)
VARIABLES	IMR	IMR	IMR
Democ1	3.722		
	(2.678)		
Democ2		-3.622***	
		(0.620)	
PR			1.175
			(1.927)
CL			2.899
			(2.574)
GDPPC	-0.00162**	-0.00144**	-0.00161**
	(0.000735)	(0.000560)	(0.000731)
IQ	9.493	6.724	9.361
	(6.010)	(5.805)	(5.963)
PGR	1.719	2.888	1.696
	(3.787)	(3.379)	(3.777)
PS	-1.889	-0.306	-1.801
	(5.434)	(4.434)	(5.409)
Constant	57.12***	83.65***	55.83***
	(17.76)	(9.600)	(17.71)
Observations	693	693	693
R-squared	0.116	0.260	0.117
Number of countries	35	35	35

Cable 4.13 Dependent	Variable:	Infant	Mortality	(Fixed	Effects	Estimations)
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Robust standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1

The findings further showed that GDP per capita, a control variable, seemed to dampen progress toward amelioration of infant mortality rate. The DGPPC exerts a negative impact on infant mortality at the 0.05 level. This could be explained by the

lack of sufficient and adequate healthcare systems and services throughout SSA. Moreover, many countries in SSA are imbued with unrelenting discrepancies in wealth and rampant poverty. In order to improve on the infant mortality rate in SSA, it will take more than improving solely personal income. Governments need to implement better public policies that could improve environmental conditions and healthcare.

After controlling for country-specific heterogeneities, the results in Table 4.14 below have dramatically changed. The negative impact of multiparty democracy 1 on life expectancy has disappeared but multiparty democracy 2 still has a positive effect on the same variable. What is surprising here is that multiparty democracy 2 is the only variable that was significant out of all the independent variables. Hence, Democ2 was significant at the 0.01 level, which implies that a unit change in the value of multiparty democracy 2 is likely to be associated with a unit increase in life expectancy. That was the double of what the random effects estimation has shown for the association between the two variables.

The results of this kind reinforce the prodemocracy theories, which stress the idea that popular participation in government empowers ordinary citizens and should as a result, lead governments to be more accountable to their interests (Gerring et al., 2015; Gerring et al., 2012; Ross, 2006). The proponents of those theories fiercely believe that democracy would bring about higher government social spending which in turn would improve the welfare of the poor and lead to amelioration in social welfare as measured by mortality, literacy, and other human development outcomes (Gerring et al., 2015; Gerring et al., 2012). However, given the limited resources in most SSA countries and the lack of quality institutions, there are unrelenting discrepancies in wealth and rampant poverty which do not lead to longevity for every citizen.

	(1)	(2)	(3)
VARIABLES	LEXP	LEXP	LEXP
Democ1	-0.770		
	(0.675)		
Democ2		1.000***	
		(0.183)	
PR			-0.296
			(0.488)
CL			-0.511
			(0.693)
GDPPC	0.000453	0.000404	0.000452
	(0.000341)	(0.000291)	(0.000341)
IQ	-1.920	-1.292	-1.900
	(1.681)	(1.459)	(1.683)
PGR	0.508	0.186	0.512
	(0.951)	(0.802)	(0.951)
PS	0.166	-0.397	0.159
	(1.308)	(1.031)	(1.309)
Constant	55.39***	48.94***	55.53***
	(4.034)	(2.649)	(4.133)
Observations	693	693	693
R-squared	0.096	0.238	0.096
Number of countries	35	35	35

 Table 4.14 Dependent Variable: Life Expectancy (Fixed Effects Estimations)

After controlling for country-specific heterogeneities, the fixed effects estimation results in Table 4.15 have become quite surprising. Out of the four measures of multiparty democracy, none has been found to have a relationship with the measure of human development, unlike in the random effect model where three out of the four explanatory variables of interest (Democ1, Democ2, and CL) were found to have some effect on the dependent variable (BASW). These results do in fact contradict the prodemocracy theories but nonetheless they corroborate the findings of the recent works on the relationship between democracy and human development. Numerous studies among which large samples quantitative and qualitative inquiries have been conducted to corroborate the absence of tangible relations between regime type and diverse aspects or measures of human development (Gerring et al., 2015; Gerring et al., 2012; McGuire, 2006; Ross, 2006; Shandra et al., 2004). These studies

have fiercely challenged and debunked the commonly held view according to which democracy influences people's well-being. In fact, beyond the context of the OECD countries, there has been no substantiation of tangible relationships between public spending and human development beyond the context of the OECD countries (Filmer & Pritchett, 1999; McGuire, 2006).

	(1)	(2)	(3)
VARIABLES	BASW	BASW	BASW
Democ1	-0.508		
	(1.060)		
Democ2		0.505	
		(0.363)	
PR			0.467
			(0.731)
CL			-1.426
			(1.133)
GDPPC	0.000770**	0.000731**	0.000783**
	(0.000378)	(0.000347)	(0.000374)
IQ	-5.156*	-4.814	-5.214*
	(2.895)	(2.853)	(2.848)
PGR	-0.943	-1.179	-1.009
	(1.269)	(1.303)	(1.246)
PS	-1.474	-1.742	-1.483
	(1.717)	(1.760)	(1.710)
Constant	60.04***	56.54***	61.74***
	(5.386)	(4.250)	(5.459)
Observations	588	588	588
R-squared	0.141	0.159	0.153
Number of countries	35	35	35

Table 4.15 Dependent Variable: Basic Drinking Water (Fixed Effects Estimations)

Robust standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1

Overall, the findings showed that the four measures of multiparty democracy had mixed-effects over the measures of human development and across the three estimation techniques (OLS, random, and fixed effects) that have been used so far. For instance, the two principal measures of multiparty democracy (Democ1 and Democ2) had a significant positive effect on the measures of human development as well as some negative impacts and other insignificant associations. Multiparty democracy 2 was shown to have a positive relationship with 3 out of 4 measures of human development (HDI, LEXP, and BASW) in the OLS and random effects estimations and 2 positive relations in the fixed effect estimations while showing negative and insignificant associations with infant mortality in the same estimations. In the meantime, multiparty democracy 1 appeared to be positively related to infant mortality in the random effects estimation while showing negative and insignificant relations with the human development index, life expectancy, and basic drinking water in the OLS and fixed effects estimations. These mixed findings lend nevertheless support to part of research hypothesis 2 and the recent literature (Gerring et al., 2015; Gerring et al., 2012; Ross, 2006) which indicated some long-term positive effects of multiparty democracy on human development. In fact, according to the recent literature, multiparty democracy has little to no effect on human development, characterized in these results by a negative and low magnitude positive relationship between the two variables (Gerring et al., 2015; Gerring et al., 2012; Ross, 2006).

4.3.2 Effect of Social Cohesion on Human Development

This section examines the hypothesis according to which social cohesion has a positive influence on human development. In order to test this hypothesis across the estimations, one measure of social cohesion was used, termed SC, and four different measures of human development as the dependent variables: the human development index (HDI), infant mortality (IMR), a proxy of human development that is widely used in the literature, life expectancy (LEXP), and basic drinking water (BASW), two other proxies of human development. Other variables were added to the model as control variables in accordance with the existing literature; these were per capita GDP (GDPPC), institutional quality (IQ), population growth (PGR), and political stability (PS). The analyzes were done using three different estimation techniques: pooled OLS, random effects, and fixed effects.

Pooled OLS Estimation

The OLS results are shown in Table 4.16 below. OLS techniques usually pool the cross-sections and estimate the model based on weighted least squares. These estimation techniques allow for panel heterogeneity and the spatial correlation between the error terms across the sampled countries. It is therefore used in this study as a baseline estimation technique.

According to models (1) to (4) in Table 4.16 below, the results showed that social cohesion is associated with the four measures of human development. It seemed to be positively related to infant mortality at the 0.01 level, and negatively with HDI, life expectancy, and basic drinking water at the same error level of 0.01, while controlling for GDP per capita, institutional quality, population growth, and political stability. The independent variables explained 71% (R2 = 0.715) of the total variations in the dependent variable in column (1), while 59%, 46%, and 52% of the total variations in the dependent variable were explained by the independent variables in models (2), (3), and (4) respectively. In order to estimate the effect of social cohesion on human development, it was hinted that a 1% change in the value of social cohesion, if we control for political stability, population growth, institutional quality, and per capita GDP, will be associated respectively with a -0.0150 point decrease in the human development index, a 4.884 increase in infant mortality rate improvement, a -1.379 point decrease in life expectancy, and a -1.686 decrease in basic drinking water addition in Sub-Saharan Africa. These findings are in line with the current literature which in essence has found a rather distal relationship between social cohesion and human development. In fact, according to the proponents of the social cohesion theory, among whom are Easterly et al. (2006), social equity and group cohesion first lead to low socio-economic cleavages, then boost levels of trust and civic participation before leading to quality institutions and economy growth, which are prerequisite for human development. It is therefore not surprising to see some negative impacts of social cohesion on certain measures of human development in the case of SSA, which is a theatre of rampant social inequality and low social cohesion.

	(1)	(2)	(3)	(4)
VARIABLES	HDI	IMR	LEXP	BASW
SC	-0.0150***	4.884***	-1.379***	-1.686***
	(0.000795)	(0.238)	(0.0694)	(0.203)
GDPPC	4.94e-06***	0.000426***	-0.000121***	0.000433***
	(5.03e-07)	(8.85e-05)	(2.53e-05)	(7.98e-05)
IQ	0.00797	-3.461**	-0.528	-0.661
	(0.00554)	(1.507)	(0.447)	(1.303)
PGR	-0.00733***	-0.949	1.961***	-5.503***
	(0.00283)	(1.091)	(0.289)	(0.582)
PS	-0.0186***	7.455***	-1.974***	-2.828***
	(0.00414)	(1.209)	(0.322)	(0.927)
Constant	0.689***	-3.437	70.43***	96.61***
	(0.00995)	(2.799)	(0.975)	(2.079)
Observations	667	693	693	588
R-squared	0.715	0.598	0.466	0.524

Table 4.16 Dependent Variables: HDI, IMR, LEXP, BASW (OLS Estimation)

Speaking of the control variables that were included in the models—per capita GDP, institutional quality, political stability, and population growth rate—they were found to show some association with the measures of human development. Hence, GDPPC was shown to have a positive impact respectively with HDI, infant mortality, and basic drinking water. Yet, it also seems to dampen life expectations. It is not a big surprise to see that GDPPC growth had negative impact on life expectancy, although it is unclear under what condition that impact would occur. One clue would be that, oftentimes, people tend to forget that per capita growth does not mean growth of government social spending. Some Africans countries have great per capita income share but poor healthcare systems, poor environmental conditions, and limited healthcare facilities.

The results have also shown that institutional quality is only related to infant mortality, which it seems unfortunately to dampen in Sub-Saharan Africa. This result is contrary to what the literature and theories of social cohesion have suggested. In fact, quality institutions are supposed to lead to rational and adequate government spending in all of the social and economic sectors of the life of a country, including child care programs and improvement of women's conditions. As for population growth, it seemed to have a positive impact on life expectations, but showed some negative influence vis-à-vis the other human development measures (mode 1, 2, and 4). This result suggests that population growth is not a hindrance to life expectancy if countries have sufficient economic resources and if they redistribute them adequately. Further results showed that political stability impacts positively infant mortality but negatively HDI, life expectancy, and basic drinking water. This case is particularly true in the context of SSA, where political problems often degenerate in civil conflicts with its toll of population dispersal, hunger, malnutrition, and infant mortality. Hence the more politically stable a country is, the more there is peace for everybody, including children.

Random Effects Estimation

The random effects results are shown in Table 4.17 below. Random effects techniques help to control for panel heterogeneity and to estimate the effect of timeinvariant variables. After controlling for specific heterogeneities and estimating the time invariants, the results have slightly changed but the positive effects of social cohesion on infant mortality have remained unchanged. Hence, from models (1) to (4) in Table 4.17 below, it is easy to notice the similarity of results with regards to the impact of social cohesion on infant mortality in both OLS and the random effects estimations. Social cohesion seemed to be positively related to infant mortality and negatively to HDI, life expectancy, and basic drinking water at the 0.01 level. That was exactly the same result obtained from the OLS estimation. The only difference resided in the value of the forecasted results. In order to estimate the results, a unit change in the value of social cohesion is likely to be associated with a 4.225 point increase in infant mortality rate improvement, while controlling for per capita GDP growth, institutional quality, population growth, and political stability. Likewise, the same amount of change (1%) is associated with a -0.0136 points decrease in the human development index, a -1.187 points decrease in life expectancy, and a -1.594 decrease in basic drinking water addition or services. These findings simply indicated that even if the impact of social cohesion on infant mortality is confirmed by the subsequent estimation results, it will likely be a long-term effect rather an immediate one.

	(1)	(2)	(3)	(4)
VARIABLES	HDI	IMR	LEXP	BASW
SC	-0.0136***	4.225***	-1.187***	-1.594***
	(0.00203)	(0.591)	(0.195)	(0.271)
GDPPC	5.79e-06**	-0.000568**	0.000173	0.000520***
	(2.92e-06)	(0.000283)	(0.000168)	(0.000179)
IQ	0.00523	1.969	-0.563	-2.028
	(0.0137)	(4.222)	(1.188)	(2.270)
PGR	0.00524	0.974	0.853	-0.777
	(0.0100)	(2.897)	(0.835)	(0.648)
PS	-0.0203**	2.357	-1.098	-3.161**
	(0.00812)	(3.464)	(0.822)	(1.453)
Constant	0.631***	7.017	69.58***	81.99***
	(0.0338)	(9.096)	(3.155)	(3.516)
Observations	667	693	693	588
Number of countries	35	35	35	35
	Pol	ust standard or	rora in paranthe	

Table 4.17 Dependent Variables: HDI; IMR, LEXP, BASW (Random Estimations)

With reference to the control variables that were included in the models—per capita GDP, institutional quality, political stability, and population growth rate—only two of them (GDPPC and PS) were found to have an impact on the measures of human development. Hence, after controlling for specific heterogeneities, per capita GDP seemed to dampen infant mortality and to have no effect on life expectancy. This is a typical result in the SSA context where there is a shortage of resources, but more importantly, unequal access to public goods and services. In this case, per capita GDP may not show a positive association with any measure of human development. In theory, good per capita income share is supposed to benefit the people, especially if it is coupled with adequate social spending. When people earn enough and can have unlimited access to healthcare services, there is hope to see a positive impact of GDPPC on infant mortality and other measures of human development.

The results further showed that political stability was only related to HDI and basic drinking water, and in both cases, it seemed to dampen their progress. In normal conditions, political stability helps to implement public polities to lead to improvement in well-being as there is less contestation and no attempts to overthrow the regime. However, in the case of SSA, political stability means that people are resigned or unable to get their voice heard. The political power is in the hands of an oligarch who decides the fate of the entire nation. In brief, in SSA political stability is not always a key factor in human development.

Fixed Effects (FE) Estimations

As stated earlier in chapter 3, ordinary least Squares (OLS) estimations do not take into account unobserved country-specific heterogeneities such as structural characteristics, time-invariant issues, and historical differences. Rather, OLS methods treat all countries as a single entity. Consequently, the random effects technique was introduced in order to control for these heterogeneities and to estimate the effect of time-invariant variables. However, because the random effects estimates may be biased because of lack of control over the omitted variables, the fixed effects technique was employed in order to circumvent these weaknesses and to deal with country-specific issues by assuring that each country has its own intercept. The unobserved structural features or historical dissimilarities that could be overlooked are factors such as colonial legacy, the role or the impact of religion on the secular institutions, and certain cultural attitudes toward both the state institutions and the environment or other human beings.

In table 4.18 below, the results remained unchanged as far as the effect of social cohesion on human development is concerned. After controlling for country-specific heterogeneities, social cohesion still showed a positive effect on infant mortality at the same error level, 0.01, and a negative impact on the remaining three dependent variables: HDI, life expectancy, and basic drinking water at the same level (0.01). In order to forecast these results, a unit change in the value of social cohesion will be associated with a 4.164 point increase in infant mortality rate amelioration, and respectively with a -0.0132, -1.210, and -1.554 decrease in the human development index, life expectance, and basic drinking water services. This is consistent with the first two estimation results and the current literature, which made frequent usage the infant mortality as a measure of human development and insisted on the existence of a long-term relationship between the two variables.

	(1)	(2)	(3)	(4)	
VARIABLES	HDI	IMR	LEXP	BASW	
SC	-0.0132***	4.164***	-1.210***	-1.554***	
	(0.00218)	(0.722)	(0.229)	(0.274)	
GDPPC	5.98e-06*	-0.000951***	0.000260	0.000526***	
	(3.17e-06)	(0.000346)	(0.000218)	(0.000165)	
IQ	0.00110	2.590	-0.0789	-2.589	
	(0.0156)	(5.730)	(1.574)	(2.427)	
PGR	0.00733	1.024	0.711	-0.518	
	(0.0107)	(3.159)	(0.842)	(0.663)	
PS	-0.0203**	1.775	-1.050	-3.134**	
	(0.00830)	(3.665)	(0.856)	(1.455)	
Constant	0.618***	9.837	70.19***	80.52***	
	(0.0375)	(12.90)	(3.712)	(3.831)	
Observations	667	693	693	588	
R-squared	0.455	0.367	0.364	0.424	
Number of countries	35	35	35	35	
	Robust standard errors in parentheses				

Table 4.18 Dependent Variables: HDI; IMR, LEXP, BASW (Fixed Effects Estimations)

Referring to the control variables that were included in the models—per capita GDP, institutional quality, political stability, and population growth rate—it is surprising to see the same results as in the random estimation. Only two of the control variables appeared to have impacts on the dependent variables. Hence, per capita GDP seemed to dampen progress in infant mortality improvement at the 0.01 level while it showed a positive impact on basic drinking water at the same error level. The only change with the random effects results was the level of error, which was 0.05. If we forecast the results of the two estimation techniques regarding the effect of GDPPC on infant mortality, it will appear that a change of 5% in the value of per capita GDP will be associated with a -0.000568 point decrease in the progress toward improvement in the infant mortality rate in the random effects estimation results, and a 1% change in the value of social cohesion will be associated with a -0.000951 point decrease toward improvement in the infant mortality rate. This comparison and its output simply showed that GDPPC has little to no positive effect on the accomplishment of a good infant mortality rate in the context of SSA. One reason to
believe in this conclusion is that, the country in SSA with the highest GDPPC, Equatorial Guinea (with \$47,562) was not among the best performers as far as infant mortality rate is concerned according to the raw data.

The results further showed that political stability appeared to dampen two measures of human development (HDI and BASW) while it showed no effect on infant mortality or life expectations after controlling for countries' specific heterogeneities. These fixed effects results are similar to the random effects estimation findings.

Overall, the results have shown that social cohesion was related to human development *via* infant mortality on which it appeared to have a positive impact at the 0.01 error level. This seemed to support the hypothesis according to which social cohesion exerts a positive influence on human development. Yet, social cohesion had also shown a negative but significant association with the other measures of human development (HDI, LEXP, BASW), leading to some mixed findings. Nevertheless, the aforementioned findings could lend support to the research hypothesis, the current literature, and supporting theory, which indicated some long-term positive effects of social cohesion on human development. In fact, according to the literature and Easterly et al.'s (2006) theory of social cohesion, institutions, and growth, social cohesion has long-term effects on human development through the accomplishment of quality institutions and economic growth.

4.3.3 Effect of the Interaction between Multiparty Democracy and Social Cohesion on Human Development

This section examines the hypothesis according to which the interaction between multiparty democracy and social cohesion exerts a positive effect on human development. In order to test this hypothesis across the estimations, one measure of social cohesion was used, termed SC, and two different measures of multiparty democracy: multiparty democracy 1 and multiparty democracy 2. Yet, because the two measures of multiparty democracy were highly correlated, they were used in separate models. The dependent variables were human development, infant mortality, life expectancy, and basic drinking water. Other variables were added to the model as control variables in accordance with the existing literature.

Pooled OLS Estimation

Table 4.19 below showed the results of the OLS estimation with only one measure of multiparty democracy (Democ1). In model (1) the effect of the interaction between multiparty democracy1 and social cohesion on human development was estimated as HDI. In model (2), the effect of the interaction between multiparty democracy 1 and social cohesion on infant mortality was estimated. In model (3), the effect of the interaction between multiparty democracy 1 and social cohesion on life expectancy was estimated; and in model (4) the effect of the interaction between multiparty democracy and social cohesion on basic drinking water was estimated.

From models (1) to (4), the results have shown that multiparty democracy 1 was negatively associated with 3 measures of human development: infant mortality, life expectancy, and basic drinking water at respectively 0.05 and 0.01 levels. In order to forecast these results, a 5% change in the value of multiparty democracy 1 will likely to be associated with a -4.479 point decrease in infant mortality rate amelioration and a 1% change in the value of multiparty democracy 1 will be associated with a -2.578 and -5.760 point decrease in progress toward life expectancy and basic water supply respectively, while controlling for GDP per capita, institutional quality, population growth, and political stability. Multiparty democracy 1 seemed thus to hinder progress in SSA toward amelioration of life expectancy or potable water addition more than infant mortality.

As for social cohesion, the second explanatory variable, it seemed to be positively related to infant mortality, while showing a negative impact on the human development index, life expectancy, and basic drinking water at the 0.01 level. In order to forecast these results, it was hinted that a unit change in the value of social cohesion will be associated with a 5.567 point increase in progress toward infant mortality improvement. On the other hand, a unit change in the value of social cohesion will likely to be associated with a -00198, -2.109, and -2.517 points decrease in progress toward ameliorating the human development index, life expectancy, and basic drinking water respectively in the Sub-Saharan African region. Thus, social cohesion seems to only improve the infant mortality rate. Surprisingly, the interactive effect of multiparty democracy and social cohesion has shown a positive association

with the human development index, life expectancy, and basic drinking water addition. It is worth noting that multiparty democracy 1 has never shown a positive association with the human development index, life expectancy, or basic drinking water. Thus, when multiparty democracy 1 interacts with social cohesion, the sign of the coefficient has changed and shown a strong positive association with the human development index, life expectancy, and basic drinking water. This finding suggested that multiparty democracy 1 is likely to exert a positive influence on human development if there is social cohesion. It also means that social cohesion is susceptible to dampening the negative effect of multiparty democracy 1. Indeed, the interaction term between multiparty democracy and social cohesion was positive and significant at the 1% level. If forecasted, a unit change in the value of the interaction term is likely to be associated with a 0.000971, 0.199, and 0.284 points increase in the human development index, life expectancy, and basic drinking water addition respectively. More so, the independent variables explained 72% (R2 = 727) of the total variations in the dependent variable in column (1), while 62%, 50%, and 54% of the total variations in the dependent variable were explained by the independent variables in models (2), (3), and (4) respectively.

	(1)	(2)	(3)	(4)
VARIABLES	HDI	IMR	LEXP	BASW
Democ1	-0.00244	-4.479**	-2.578***	-5.760***
	(0.00510)	(1.838)	(0.525)	(1.224)
SC	-0.0198***	5.567***	-2.109***	-2.517***
	(0.00145)	(0.503)	(0.138)	(0.286)
Democ1SC	0.000971***	-0.0319	0.199***	0.284***
	(0.000329)	(0.121)	(0.0327)	(0.0753)
GDPPC	3.82e-06***	0.000867***	-0.000157***	0.000561***
	(5.40e-07)	(0.000101)	(2.68e-05)	(9.14e-05)
IQ	0.0154**	-8.186***	-1.168**	-3.895***
	(0.00631)	(1.573)	(0.505)	(1.417)
PGR	-0.00259	-1.157	2.665***	-4.485***
	(0.00318)	(1.252)	(0.341)	(0.552)
PS	-0.0106**	4.971***	-1.301***	-3.016***
	(0.00458)	(1.208)	(0.354)	(0.966)
Constant	0.709***	1.148	77.12***	108.5***
	(0.0132)	(4.229)	(1.414)	(3.088)
Observations	667	693	693	588
R-squared	0.727	0.629	0.504	0.546
		Robust standar	d errors in parentl	neses

Table 4.19 Dependent Variables: HDI, IMR, LEXP, BASW (OLS Estimation with Democ1)

Robust standard errors in parenthese *** p<0.01, ** p<0.05, * p<0.1

In models (1) to (4) in table 4.20 below, the results have shown that multiparty democracy 2 (Democ2) is positively associated with three measures of human development: infant mortality, life expectancy, and basic drinking water at the 0.01 level. In order to forecast these results, a unit change in the value of multiparty democracy 1 is likely to be associated with a 2.507 point increase in infant mortality rate amelioration, a 1.509 point increase in life expectancy, and a 2.393 point increase in progress toward basic water addition respectively, while controlling for GDP per capita, institutional quality, population growth, and political stability. Multiparty democracy 2 seems thus to enhance progress in SSA toward amelioration infant mortality rate, life expectancy, and basic water addition.

As for social cohesion, the second explanatory variable of interest, it seemed to be positively related to infant mortality, while showing a negative impact on the human development index, life expectancy, and basic drinking water at the 0.01 level. In order to forecast these results, it could be hinted that a unit change in the value of social cohesion is associated with a 5.824 point increase in progress toward infant mortality improvement. On the other hand, a unit change in the value of social cohesion is likely to be associated with a -00135, -0807, and -0.857 points decrease in progress toward ameliorating the human development index, life expectancy, and basic drinking water respectively in the Sub-Saharan African region. Thus, social cohesion seems to only improve infant mortality rate. Surprisingly, the interactive effect of multiparty democracy and social cohesion has shown a negative effect on the human development index, infant mortality, life expectancy, and basic drinking water addition. It is important to note that multiparty democracy 2 has never shown a negative relationship with the human development index, life expectancy, or basic drinking water. Thus, when multiparty democracy 2 interacted with social cohesion, the sign of the coefficient changed and showed a negative association with the human development index, life expectancy, and basic drinking water. These findings suggested that multiparty democracy 2 is likely to have a positive effect on human development if and only if there is a great deal of social cohesion within SSA. It also means that social cohesion is the key to human development since the sign of the interaction term between the two variables depends on the sign of the coefficient of social cohesion. Indeed, the interaction term between multiparty democracy and social cohesion was negative and significant at the 1% level because the signs of the coefficients of social cohesion were negative in models 1, 3, and 4. If forecasted, a unit change in the value of the interaction term is likely to be associated with a -0.000301, -0.0947, and -0.112 point decrease in the human development index, life expectancy, and basic drinking water respectively. More so, the independent variables explained 71% (R2 = 716) of the total variations in the dependent variable in model (1), while 60%, 50%, and 54% of the total variations in the dependent variables were explained by the independent variables in models (2), (3), and (4) respectively.

	(1)	(2)	(3)	(4)
VARIABLES	HDI	IMR	LEXP	BASW
Democ2	0.00393	2.507***	1.509***	2.393***
	(0.00255)	(0.856)	(0.262)	(0.586)
SC	-0.0135***	5.824***	-0.807***	-0.857***
	(0.00126)	(0.396)	(0.118)	(0.306)
Democ2SC	-0.000301*	-0.148**	-0.0947***	-0.112***
	(0.000169)	(0.0583)	(0.0174)	(0.0355)
GDPPC	4.79e-06***	0.000442***	-0.000124***	0.000514***
	(5.29e-07)	(9.47e-05)	(2.44e-05)	(8.28e-05)
IQ	0.00573	-5.265***	-1.582***	-2.787**
	(0.00593)	(1.496)	(0.452)	(1.296)
PGR	-0.00489	0.125	2.633***	-4.502***
	(0.00335)	(1.265)	(0.359)	(0.594)
PS	-0.0170***	8.236***	-1.445***	-2.502***
	(0.00428)	(1.103)	(0.324)	(0.967)
Constant	0.660***	-23.54***	58.60***	75.94***
	(0.0243)	(7.927)	(2.396)	(5.395)
Observations	667	693	693	588
R-squared	0.716	0.605	0.501	0.548

Table 4.20 Dependent Variables: HDI, IMR, LEXP, BASW (OLS Estimation with Democ2)

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Random Effects Estimation

Table 4.21 below shows the results of the OLS estimation with only one measure of multiparty democracy (Democ1). In model (1) the effect of the interaction between multiparty democracy 1 and social cohesion on human development index was estimated. In model (2), the effect of the interaction between multiparty democracy 1 and social cohesion on infant mortality was estimated. In model (3), the effect of the interaction between multiparty democracy 1 and social cohesion on life expectancy was estimated; and in model (4), the effect of the interaction between multiparty democracy and social cohesion on basic drinking water.

From model (1) to (4), the results showed that multiparty democracy 1 had no effect whatsoever on any measure of human development after controlling for the specific heterogeneities that were beyond the capacity of the OLS technique. On the

contrary, social cohesion retained the same significant positive relation with infant mortality, while showing a negative impact on the human development index, life expectancy, and basic drinking water at the same 0.01 error level as it showed in the OLS technique. In order to forecast these results, it was hinted that a unit change in the value of social cohesion is associated with a 4.369 point increase in progress toward infant mortality improvement. On the other hand, a unit change in the value of social cohesion is likely to be associated with a -00199, -1.450, and -1.890 points decrease in progress toward ameliorating the human development index, life expectancy, and basic drinking water services respectively in the Sub-Saharan African region. Thus, social cohesion seems to only improve infant mortality rate. Surprisingly, the interactive effect of multiparty democracy and social cohesion has shown a positive association with the human development index, infant mortality, and life expectancy, showing here no effect on basic drinking water. It is worth noting also that multiparty democracy 1 has never shown a positive relationship with the human development index or life expectancy. However, when multiparty democracy 1 interacted with social cohesion, the sign of the coefficient of these variables changed and showed a strong positive relationship with the human development index and life expectancy, in addition with infant mortality, which turned out to be positive. These finding suggested that multiparty democracy 1 is likely to have a positive effect on human development if there is social cohesion within a country. The results also mean that social cohesion has the potential of dampening the negative effect of multiparty democracy 1. Indeed, the interaction term between multiparty democracy and social cohesion was positive and significant at the 1% and 10% levels. If forecasted, a unit change in the value of the interaction term is likely to be associated with a 0.0551 and 0.00112 point increase in life expectancy and infant mortality respectively; and a 10% change in the value of the interaction term will be associated with a 0.00159 point increase in the human development index.

	(1)	(2)	(3)	(4)
VARIABLES	HDI	IMR	LEXP	BASW
Democ1	-0.0245	-1.128	-0.408	0.158
	(0.0157)	(5.654)	(1.639)	(2.084)
SC	-0.0199***	4.369***	-1.450***	-1.890***
	(0.00309)	(1.337)	(0.359)	(0.585)
Democ1SC	0.00159*	0.00112***	0.0551***	0.0524
	(0.000957)	(0.393)	(0.108)	(0.105)
GDPPC	5.70e-06**	-0.000422*	0.000146	0.000478***
	(2.88e-06)	(0.000250)	(0.000149)	(0.000166)
IQ	0.00716	0.802	-0.324	-1.375
	(0.0138)	(3.786)	(1.146)	(2.465)
PGR	0.00974	0.947	0.986	-0.549
	(0.00786)	(2.846)	(0.781)	(0.719)
PS	-0.0186**	2.157	-0.864	-2.607*
	(0.00870)	(3.693)	(0.886)	(1.345)
Constant	0.714***	8.011	71.57***	82.61***
	(0.0493)	(14.62)	(5.183)	(8.347)
Observations	667	693	693	588
Number of countries	35	35	35	35

Table 4.21 Dependent Variables: HDI, IMR, LEXP, BASW (RE Estimation with Democ1)

Robust standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1

From model (1) to (4) in table 4.22 below, the results show that multiparty democracy 2 had no more any impact on the measures of human development when controlling for the specific panel heterogeneities that escaped the OLS technique. On the contrary, social cohesion retained the same significant positive relation with infant mortality, while showing a negative impact on the human development index, life expectancy, and basic drinking water at the same 0.01 error level as was shown in the OLS technique. To forecast these results, it was hinted that a unit change in the value of social cohesion is associated with a 4.708 point increase in infant mortality rate amelioration. On the other hand, a unit change in the value of social cohesion is likely to be associated with a -0.0118, -1.016, and -2.018 points decrease in progress toward amelioration of the human development index, life expectancy, and basic drinking water respectively in the Sub-Saharan African region. Thus, social cohesion seems to only improve infant mortality rate. Further, the interactive effect of multiparty

democracy and social cohesion that were shown to be negative with the human development index, infant mortality, life expectancy, and basic drinking water in the OLS estimation results have disappeared with only one remaining, the negative effect on infant mortality. It is important to note also that multiparty democracy 2 has no significant relation with any measure of human development. Thus, when it interacted with social cohesion, the effects of the interaction term have become void, with only one remaining, a negative effect on infant mortality. These findings suggested that multiparty democracy 2 is likely to have a positive association with human development if there is a great deal of social cohesion within a country. Likewise, social cohesion is at its best when associated with multiparty democracy. Indeed, the interaction term between multiparty democracy 2 and social cohesion is negative and significant at the 1% level in model 2 even though social cohesion is positively associated with infant mortality. If forecasted, a unit change in the value of the interaction term is likely to be associated with a -0.218 point decrease in the infant mortality rate while controlling for GDP per capita growth, institutional quality, population growth, and political stability.

	(1)	(2)	(3)	(4)
VARIABLES	HDI	IMR	LEXP	BASW
Democ2	0.00512	1.539	0.499	-1.417
	(0.00612)	(1.953)	(0.547)	(1.003)
SC	-0.0118***	4.708***	-1.016***	-2.018***
	(0.00315)	(1.028)	(0.289)	(0.341)
Democ2SC	4.89e-05	-0.218**	0.00166	0.0735
	(0.000303)	(0.110)	(0.0267)	(0.0505)
GDPPC	5.98e-06**	-0.000709**	0.000175	0.000553***
	(2.92e-06)	(0.000315)	(0.000154)	(0.000210)
IQ	0.00403	1.880	-0.853	-2.022
	(0.0121)	(3.947)	(1.063)	(2.145)
PGR	0.00176	2.331	0.751	-0.781
	(0.00915)	(2.878)	(0.787)	(0.705)
PS	-0.0229***	4.472	-1.372*	-3.358**
	(0.00712)	(3.042)	(0.736)	(1.508)
Constant	0.586***	3.226	64.76***	90.13***
	(0.0562)	(17.77)	(5.173)	(6.703)
Observations	667	693	693	588
Number of countries	35	35	35	35

Table 4.22 Dependent Variables: HDI, IMR, LEXP, BASW (RE Estimation with Democ2)

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Fixed Effects Estimations

From model (1) to (4) in table 4.23 below, after controlling for unobserved country-specific factors and time invariants, the results showed that multiparty democracy 1 had no effect whatsoever on any measure of human development. On the contrary, social cohesion retained the same significant positive relation with infant mortality while showing a negative impact on the human development index, life expectancy, and basic drinking water at 0.01 and 0.1 levels respectively. In order to forecast these results, it could be hinted that a unit change in the value of social cohesion is associated with a 4.297 point increase in progress toward infant mortality improvement. On the other hand, a unit change in the value of social cohesion is likely to be associated with a -0.0198, -1.567, and -1.671 point decrease in progress toward ameliorating the human development index, life expectancy, and basic

seems to only improve infant mortality rate. Surprisingly however, the interactive effect of multiparty democracy and social cohesion has shown a positive association with the human development index and basic drinking water, unlike in the random effects model, where it was positive and significant with the human development index, infant mortality, and life expectancy and insignificant with basic drinking water. It is worth noting also that multiparty democracy 1 has never shown a positive relationship with the human development index or basic drinking water. However, when multiparty democracy 1 interacted with social cohesion, the sign of the coefficient of these variables has changed and shown a positive association with the human development index and basic drinking water. These findings suggested that whether significant or not, the interaction between multiparty democracy 1 and social cohesion has the potential to improve human development conditions within a country. Indeed, the interaction term between multiparty democracy and social cohesion was significant at the 1% level. If forecasted, a unit change in the value of the interaction term is likely to be associated with a 0.00159 and 0.00566 point increase in the human development index and basic drinking water respectively; and a unit change in the value of the interaction term will be associated with a -0.0119 point decrease in infant mortality rate amelioration.

	(1)	(2)	(3)	(4)
VARIABLES	HDI	IMR	LEXP	BASW
Democ1	-0.0251	-0.650	-0.573	1.106
	(0.0176)	(6.592)	(1.872)	(2.303)
SC	-0.0198***	4.297***	-1.567***	-1.671**
	(0.00352)	(1.481)	(0.439)	(0.623)
Democ1SC	0.00159***	-0.0119***	0.0716	0.00566***
	(0.00106)	(0.440)	(0.122)	(0.115)
GDPC	5.97e-06*	-0.000935**	0.000258	0.000480***
	(3.21e-06)	(0.000345)	(0.000209)	(0.000150)
IQ	0.00648	2.012	0.501	-1.923
	(0.0153)	(4.701)	(1.473)	(2.596)
PGR	0.0108	0.994	0.813	-0.317
	(0.00879)	(3.129)	(0.774)	(0.736)
PS	-0.0189**	1.464	-0.767	-2.524*
	(0.00888)	(3.963)	(0.914)	(1.320)
Constant	0.709***	10.77	73.39***	77.84***
	(0.0613)	(19.54)	(6.654)	(9.616)
Observations	667	693	693	588
R-squared	0.470	0.368	0.373	0.436
Number of countries	35	35	35	35
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Table 4.23 Dependent Variables: HDI, IMR, LEXP, BASW (FE Estimations with Democ1)

Robust standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1

From model (1) to (4) in table 4.24 below, after controlling for unobserved country-specific factors and time invariants, the results showed that multiparty democracy 2 (Democ2) appeared to be related with one measure of human development, basic drinking water. On the contrary, social cohesion retained the same significant positive relation with infant mortality while showing negative impact on the human development index, life expectancy, and basic drinking water at the same 0.01 error level as was shown in the OLS technique. In order to forecast these results, it was hinted that a unit change in the value of social cohesion is associated with a 4.566 point increase in infant mortality rate amelioration. On the other hand, a unit change in the value of social cohesion is likely to be associated with a -0.0117, -1.015, and -2.115 point decrease in progress toward amelioration of the human development index, life expectancy, and basic drinking water respectively in the Sub-Saharan African region. Thus, social cohesion seems to only improve infant mortality

rate. Additionally, the interactive effects of multiparty democracy and social cohesion that were shown to be significant and negative with infant mortality and positive with basic drinking water have remained unchanged in the fixed effects estimation. It is important to note also that multiparty democracy 2 had no significant positive relation with any measure of human development. Yet, when it interacted with social cohesion, the effects of the interaction term have become significant with both infant mortality (negatively) and basic drinking water (positively). These findings suggested that whether multiparty democracy 2 is significant or not, its interaction with social cohesion has the potential to improve human development conditions within a country. In other words, social cohesion is at its best when associated with multiparty democracy. Indeed, the interaction term between multiparty democracy 2 and social cohesion was negative and significant at the 0.05 level in model 2 even though social cohesion was positively associated with infant mortality, and positively significant at the 0.1 level with basic drinking water. If forecasted, a 5% change in the value of the interaction term is likely to be associated with a -0.235 point decrease in infant mortality rate amelioration, and a 10% change in the value of the interaction is associated with a 0.0999 point increase in amelioration of basic drinking water while controlling for GDP per capita growth, institutional quality, population growth, and political stability. These results also suggested a distal rather than a proximal effect of the interaction of both variables on human development.

	(1)	(2)	(3)	(4)
VARIABLES	HDI	IMR	LEXP	BASW
Democ2	0.00427	1.634	0.596	-1.929*
	(0.00651)	(1.994)	(0.615)	(1.073)
SC	-0.0117***	4.566***	-1.015***	-2.115***
	(0.00332)	(1.097)	(0.311)	(0.363)
Democ2SC	0.000115	-0.235**	-0.000822	0.0999*
	(0.000324)	(0.109)	(0.0297)	(0.0535)
GDPC	5.99e-06*	-0.000996***	0.000264	0.000575***
	(3.18e-06)	(0.000359)	(0.000210)	(0.000200)
IQ	0.000814	3.767	-0.174	-2.814
	(0.0135)	(4.832)	(1.390)	(2.183)
PGR	0.00275	2.384	0.493	-0.463
	(0.00982)	(3.141)	(0.776)	(0.741)
PS	-0.0234***	4.084	-1.340*	-3.385**
	(0.00720)	(3.248)	(0.773)	(1.491)
Constant	0.582***	8.240	65.14***	91.10***
	(0.0561)	(19.04)	(5.307)	(6.888)
Observations	667	693	693	588
R-squared	0.500	0.435	0.409	0.447
Number of c id	35	35	35	35

Table 4.24 Dependent Variables: HDI, IMR, LEXP, BASW (FE Estimations with Democ2)

Robust standard errors in parentheses *** p < 0.01 ** p < 0.05 * p < 0.1

*** p<0.01, ** p<0.05, * p<0.1

Overall, after controlling for unobserved country-specific factors and the time invariants in the fixed effects model, the results have shown that the two measures of the interaction between multiparty democracy and social cohesion (Democ1SC and Democ2SC) had positive effects on two measures of human development (HDI and BASW) while showing a negative impact on infant mortality and no significant association with life expectancy. Further, with regard to the magnitude of the relationship, one could only conclude that the interaction between multiparty democracy and social cohesion has a positive long-term effect on human development. These mixed findings lend support to the third research hypothesis (H3) according to which the interaction between multiparty democracy and social cohesion has a positive effect on human development.

4.3.4 Instrumental Variable Approach and Robustness Checks

It is important to note that ordinary least squares, random effects, and fixed effects estimations have some major downsides that could derive from the presence of endogeneity and omitted variable prejudice. These problems were addressed with the use of an instrumental variable (IV) approach in the system generalized method of moments.

The System Generalized Method of Moments (GMM)

System GMM estimations use internal variables, usually the lagged values of the dependent variables as part of the independent variables. The use of such an instrumental approach helped to address the problem of endogeneity. The results from the system GMM estimation in Table 4.25 below, columns (1) to (5), indicated that the lag of human development index was statistically significant (0.997, 1.001, 0.992, 0.996, 0.999) at the 1% level, suggesting that human development is strongly persistent in SSA. In fact, a lagged dependent variable in system GMM can only be considered to be strongly persistent if it is significant and higher than 0.800, which is the general criterion for establishing such persistence. Considering the choice of one lag length, the insignificant specification test results of the AR (2) (0.790, 0.835, 0.945, 0.882, and 0.528) revealed that the system GMM model did not suffer from second-order serial correlation, and that the null hypothesis could not be rejected. In addition, the results of the Hansen test (0.167, 0.144, 0.266, 0.185, 0.230) have shown that the instruments used were not over identified, suggesting that they were valid or not correlated with the error term. The results of the system GMM were to a lesser extent consistent with the fixed effects estimation despite some minor differences. The coefficients of many of the variables were not significant compared to the fixed effects. In column (2, 3, and 5) for instance, social cohesion was shown to have no influence on human development unlike in the fixed effects estimation, where it exerted a negative impact on three measures of human development (HDI, LEXP, BASW) and a positive one on the fourth (IMR). Multiparty democracy 2 was also not significant as it was in the fixed effects estimation and so was its interaction with social cohesion, which was not only insignificant but also showed a negative

coefficient. In column (3) however, apart from the error level, the statistical direction of multiparty democracy 1 and its interaction with social cohesion did not change. They remained negative and significant for the first named and positively significant for the latter at the 1% error level. The positive sign of the interaction between multiparty democracy 1 and social cohesion (Democ1SC) suggested that social cohesion has the potential for dampening the negative effect of multiparty democracy on human development.

	(1)	(2)	(3)	(4)	(5)
VARIABLES	HDI	HDI	HDI	HDI	HDI
L.HDI	0.997***	1.001***	0.992***	0.996***	0.999***
	(0.0138)	(0.0210)	(0.0288)	(0.0159)	(0.0269)
Democ1	-0.00163		-0.0233*		
	(0.00100)		(0.0124)		
Social cohesion		1.81e-05	-0.00531		0.00163
		(0.000367)	(0.00342)		(0.00122)
Democ1SC			0.00137*		
			(0.000774)		
Democ2				0.000360	0.00558
				(0.000262)	(0.00434)
Democ2SC					-0.000332
	Σ				(0.000267)
GDPPC	5.56e-08	-6.59e-08	2.89e-07	-6.38e-08	-2.77e-07
	(3.13e-07)	(2.68e-07)	(4.02e-07)	(2.78e-07)	(2.96e-07)
IQ	-0.00347	-0.00290	0.00128	-0.00281	-0.00238
	(0.00267)	(0.00282)	(0.00554)	(0.00258)	(0.00304)
PGR	0.00376***	0.00393***	0.00595**	0.00367***	0.00471***
	(0.00128)	(0.00123)	(0.00229)	(0.00116)	(0.00141)
PS	0.000525	0.00154	0.00147	0.00116	0.00258*
	(0.00113)	(0.00110)	(0.00189)	(0.000982)	(0.00143)
Observations	625	625	625	625	625
No. of groups	35	35	35	35	35
No. of instruments	28	27	27	28	27
AR (1)	0.000	0.000	0.001	0.000	0.001
AR (2)	0.790	0.835	0.945	0.882	0.528
Sargan (OIR)	0.000	0.000	0.007	0.000	0.000
Hansen (OIR)	0.167	0.144	0.266	0.185	0.230

Table 4.25 GMM Estimation (with HDI as the Dependable Variable)

Standard errors in parentheses

The results from the system GMM estimation in Table 4.26 below, columns (1) to (5), indicated that the lag of infant mortality was statistically significant (0.970, 0.970, 0.965, 0.967, 0.981) at the 1% level, suggesting that infant mortality is strongly persistent in SSA. In fact, a lagged dependent variable in system GMM can only be considered to be strongly persistent if it is significant and higher than 0.800, which is the general rule for establishing such persistence. Considering the choice of one lag length, the insignificant specification test results of the AR (2) (0.528, 0.531, 0.450, 0.554, and 0.417) revealed that the system GMM model did not suffer from secondorder serial correlation and that the null hypothesis could not be rejected. In addition to that, the results of the Hansen test (0.230, 0.219, 0.662, 0.112, and 0.262) have shown that the instruments used were not over identified and therefore they were valid or not correlated with the error term. The Hansen test of over-identification restrictions (OIR) should not be significant in that the null hypothesis is that the instruments are valid or not correlated with the error term. The results of the system GMM were to a lesser extent consistent with the fixed effects estimation with several differences. The coefficients of many of the variables were significant after controlling for endogeneity issues, unlike in the fixed effects estimation results. In column (3) for instance, the coefficient of multiparty democracy 1, which has never shown a positive significance in the fixed effects estimation, was positive in the GMM estimation, though the statistical direction of its interaction with social cohesion (Democ1SC) has remained unchanged. In columns (3) and (5), social cohesion was shown to have both a positive and negative impact on infant mortality, unlike in the fixed effects estimation, where it has always been positive. Hence, in column (3) social cohesion has retained its positive effect on infant mortality but the magnitude of the relationship has literally shrunk from 4.164 at the 1% error level to 1.054 at the 5% level; and in column (5), the sign of the coefficient of the variable has become negative at the 10% level. For a reminder, social cohesion has always shown a positive significant relation with infant mortality in the fixed effects estimation. Further, in the same column (5), the sign of the coefficient of multiparty democracy 2 was shown to be negative and significant as it was in the fixed effects estimation, but its interaction with social cohesion has become positive at the 10% error level. This

suggested that the negative effect of multiparty democracy 2 on infant mortality has been dampened by its interaction with social cohesion.

	(1)	(2)	(3)	(4)	(5)
VARIABLES	IMR	IMR	IMR	IMR	IMR
L.IMR	0.970***	0.970***	0.965***	0.967***	0.981***
	(0.00915)	(0.00915)	(0.0107)	(0.0102)	(0.0139)
Democ1	0.152	0.152	4.783**		
	(0.160)	(0.160)	(1.770)		
SC			1.054**		-0.672*
			(0.451)		(0.340)
Democ1SC			-0.271**		
			(0.107)		
Democ2				-0.0516	-1.860*
				(0.0518)	(0.986)
Democ2SC					0.113*
					(0.0612)
GDPPC	-3.24e-05**	-3.24e-05**	-8.40e-05**	-3.87e-05*	-4.15e-05
	(1.40e-05)	(1.40e-05)	(3.51e-05)	(2.18e-05)	(4.07e-05)
IQ	0.589*	0.589*	0.0760	0.644**	0.503
	(0.294)	(0.294)	(0.622)	(0.275)	(0.651)
PGR	-0.180	-0.180	-0.604	-0.181	-0.283
	(0.217)	(0.217)	(0.359)	(0.200)	(0.416)
PS	0.00136	0.00136	-0.106	-0.0626	-0.603
	(0.143)	(0.143)	(0.492)	(0.137)	(0.427)
Observations	658	658	658	658	658
No. of groups	35	35	35	35	35
No. of instruments	28	27	28	27	28
AR (1)	0.001	0.180	0.171	0.168	0.059
AR (2)	0.528	0.531	0.450	0.554	0.417
Sargan (OIR)	0.000	0.000	0.000	0.000	0.000
Hansen (OIR)	0.230	0.219	0.662	0.112	0.262
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Table 4.26 GMM Estimation (with IMR as the Dependable Variable)

standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1

From the results of the system GMM estimation method in Table 4.27 below, columns (1) to (5) indicated that the lag of life expectancy was statistically significant (-0.200, -0.114, -0.179, -0.204, -0.182) at the 1% level, suggesting that life expectancy is weakly persistent in SSA. Considering the choice of one lag length, the insignificant specification test results of the AR (2) (0.122, 0.101, 0.012, 0.100, and 0.185) revealed that the system GMM model did not suffer from second-order serial

correlation and that the null hypothesis could not be rejected. In addition to that, the results of the Hansen test (0.936, 0.936, 0.936, 0.936, 0.937) have shown that the instruments used were not over identified and therefore they were valid or not correlated with the error term. The result of the system GMM estimation was to a lesser extent consistent with the fixed effects method with several major differences. The coefficients of many of the variables which were not significant in the fixed effects estimation have become significant in the GMM estimation. Hence in column (1), the sign of the coefficient of multiparty democracy 1 is significant and positive at the 10% level unlike in the fixed effects estimation, where it appeared non-significant and negative. In column (2), the sign of the coefficient of multiparty democracy 1, which was positive in column 1, has become negative and significant at the 1% level, contrary to what was indicated in the fixed effects estimation results; and the interaction between multiparty democracy 1 and social cohesion (Democ1SC), which was insignificant in the fixed effects estimation, has become significant and positive

interaction between multiparty democracy 1 and social cohesion (Democ1SC), which was insignificant in the fixed effects estimation, has become significant and positive in the GMM estimation (0.314) at the 1% level. In column (5), the coefficient of the social cohesion variable has become positive and significant at the 10% level (0.238), contrary to the fixed effects estimation results, where it has never been positive. Furthermore, in the same column, the sign of multiparty democracy 2 has remained positive and significant as in the fixed effects estimation at the 1% level in the GMM estimation (2.708), whereas its interaction with social cohesion, which was insignificant and negative in the fixed effects estimation, has become significant and negative in the GMM model at the 1% level. This suggests that the combined effects of the two variables had a negative effect on life expectancy.

	(1)	(2)	(3)	(4)	(5)
VARIABLES	LEXP	LEXP	LEXP	LEXP	LEXP
L.LEXP	-0.200***	-0.114***	-0.179***	-0.204***	-0.182***
	(0.00986)	(0.0295)	(0.0176)	(0.0122)	(0.0279)
Democ1	0.253*		-3.980***		
	(0.131)		(0.633)		
SC		-1.459***	-2.054***		0.238*
		(0.109)	(0.176)		(0.127)
Democ1SC			0.314***		
			(0.0404)		
GDPPC	3.86e-05*	-0.000191***	-0.000162***	4.56e-05**	-
					0.000163**
					*
	(2.20e-05)	(2.47e-05)	(1.94e-05)	(1.84e-05)	(1.97e-05)
IQ	4.317***	-0.400	0.424	4.189***	-0.130
	(0.342)	(0.350)	(0.430)	(0.257)	(0.475)
PGR	0.932***	2.182***	2.894***	0.911***	3.077***
	(0.107)	(0.264)	(0.455)	(0.0843)	(0.486)
PS	1.247***	-2.158***	0.121	1.162***	0.424
	(0.185)	(0.460)	(0.406)	(0.217)	(0.595)
Democ2				-0.101**	2.708***
				(0.0441)	(0.311)
Democ2SC					-0.199***
					(0.0201)
Observations	653	653	653	653	653
No. of groups	35	35	35	35	35
No. of	27	28	28	27	28
instruments					
AR (1)	0.000	0.000	0.000	0.000	0.001
AR (2)	0.122	0.101	0.012	0.100	0.185
Sargan (OIR)	0.000	0.000	0.000	0.000	0.000
Hansen (OIR)	0.936	0.936	0.936	0.936	0.937

Table 4.27 GMM Estimation (with LEXP as the Dependable Variable)

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

From the results of the system GMM estimation method in Table 4.28 below, columns (1) to (5) indicated that the lag of basic drinking water was statistically significant (0.993, 0.994, 0.986, 0.997, 0.982) at the 1% level, suggesting that basic drinking water is strongly persistent in SSA. Indeed, a lagged dependent variable in the system GMM can only be considered to be strongly persistent if it is significant and higher than 0.800, which is the general criterion for establishing such persistence.

Considering the choice of one lag length, the insignificant specification test results of the AR (2) (0.081, 0.084, 0.097, 0.087, and 0.092) revealed that the system GMM model did not suffer from second-order serial correlation and that the null hypothesis could not be rejected. In addition, the results of the Hansen test (0.771, 0.713, 0.754, 0.634, 0.821) have shown that the instruments used were not over identified and therefore they were valid or not correlated with the error terms. The results of the system GMM estimation were to some extent totally inconsistent with the fixed effects estimation, with several differences. The coefficients of many of the variables of interest were not significant compared to the fixed-effects. In column (2, 3, and 5) for instance, social cohesion was shown to have no impact on basic drinking water unlike in the fixed effects estimation where it had a negative, but a significant effect on all measures of BASW. Moreover, the coefficient of the interaction between multiparty democracy 1 and 2 with social cohesion (Democ1SC and Democ2SC), which were significant and positive in the fixed effects estimation at 1% and 10% respectively, have become insignificant in the system GMM estimation. In the meantime, the coefficients of the multiparty democracy 1 and 2 variables have remained insignificant in the system GMM estimation.

Overall, after controlling for endogeneity issues, the results of the system GMM appeared to confirm parts of the research hypotheses, according to which multiparty democracy has a long-term relationship with human development despite the hybrid character of the findings. Two measures of multiparty democracy, namely Democ1 and democ2, have been shown to be positively correlated with two of the four measures of human development (IMR, and LEXP), with a relatively low magnitude association, suggesting a distal rather than proximal relationship. In the meantime, social cohesion also appeared to be positively correlated with two measures of human development (IMR and LEXP), and so was its interaction with multiparty democracy 1 and 2 (Democ1SC and Democ2SC), which were shown to be positively correlated with the human development index and infant mortality rate respectively. In sum, these positive significant relationships contrasted with the negative significant and non-significant relations that these variables entertained with the other measures of human development. These mixed finding nonetheless could lend support to the recent literature and hypothesis, according to which multiparty

democracy has little to no effect on human development, or in other terms, a distal relationship with human development (Gerring et al., 2015; Gerring et al., 2012; Ross, 2006).

	(1)	(2)	(3)	(4)	(5)
VARIABLES	BASW	BASW	BASW	BASW	BASW
L.BASW	0.993***	0.994***	0.986***	0.997***	0.982***
	(0.00618)	(0.0118)	(0.0101)	(0.00541)	(0.0155)
Democ1	-0.0874	· · · ·	-0.503		``````````````````````````````````````
	(0.114)		(0.350)		
SC		-0.0123	-0.149		0.00866
		(0.0197)	(0.103)		(0.0425)
Democ1SC		$\left[\begin{array}{c} c \\ c \end{array} \right]$	0.0330		, , , , , , , , , , , , , , , , , , ,
			(0.0223)		
GDPPC	2.55e-05***	2.09e-05*	2.72e-05***	1.95e-05**	1.72e-05
	(8.57e-06)	(1.13e-05)	(9.93e-06)	(9.43e-06)	(1.58e-05)
IQ	-0.161*	-0.133	-0.0611	-0.125**	-0.145*
	(0.0861)	(0.0926)	(0.0789)	(0.0485)	(0.0716)
PGR	-0.0744	-0.0637	-0.0293	-0.0550	-0.0452
	(0.0883)	(0.0597)	(0.0364)	(0.0572)	(0.0656)
PS	-0.0372	-0.0104	0.0240	0.00776	-0.00592
	(0.0629)	(0.0436)	(0.0416)	(0.0335)	(0.0406)
Democ2		Ň Ý		-0.00107	0.145
				(0.00852)	(0.135)
Democ2SC					-0.00949
					(0.00871)
Observations	518	518	518	518	518
No. of groups	35	35	35	35	35
No. of instruments	25	25	27	26	26
AR (1)	0.094	0.095	0.089	0.094	0.093
AR (2)	0.081	0.084	0.097	0.087	0.092
Sargan (OIR)	0.882	0.812	0.952	0.855	0.895
Hansen (OIR)	0.771	0.713	0.754	0.634	0.821

Table 4.28 GMM Estimation (with BASW as the Dependable Variable)

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

CHAPTER 5

DISCUSSION OF MAJOR FINDINGS, CONCLUSION AND RECOMMENDATIONS

This chapter discusses the findings of the study, the conclusion, and recommendations. These were performed in accordance with the following research objectives: (1) to critically examine the issue of human development in SSA with regards to the alleged improvement in well-being that the population of the region was supposed to enjoy following the inception of multiparty democracy; (2) to determine the effect of multiparty democracy on human development; (3) to determine the effect of social cohesion on human development; and (4) to estimate the effect of the interaction between multiparty democracy and social cohesion on human development. As Sub-Saharan Africa continues to suffer delayed human development, and widespread socio-economic crises and political disorder, the findings and recommendations of this study are relevant and timely for the development of the region. The regime type and poverty theories assume that there is a close relationship between the mode or type of governance in use in a country and the standard of living of its people (McGuire, 2006). In fact, these theories imply that multiparty democracy has the potential to raise the living standards of the lowest income groups, while nondemocracy lowers the standards (Acemoglu et al., 2019; Altman & Castiglioni, 2009; Besley & Kudamatsu, 2006; Blaydes & Kayser, 2011; Deacon, 2009; Eterovic & Sweet, 2014; Gerring et al., 2015; Gerring et al., 2012; Haggard & Kaufman, 2008; Hanson, 2015; Kudamatsu, 2012; McGuire, 2013; Miller, 2015; Ross, 2006; A. Sen, 1999; A. K. Sen, 1981). Theories of this kind were at the origin of the push of multiparty democracy in SSA. Yet, three decades have passed since the introduction of multiparty democracy in SSA, and the region is still in pursuit of coherent and viable modes of governance and a clear-cut itinerary for social, economic, and human development.

Most contributions in the current literature on African politics blame neopatrimonialism for the continent's disappointing economic records and the large discrepancies between governments' political enticements and the demands of steady development (Alence, 2004; Erdmann & Engel, 2007; Hopper, 2017; Taylor & Williams, 2008; Van de Walle, 2001). Because they are insecure, the failing African governments are tempted to satisfy the immediate interests of politically threatening groups (Alence, 2004). This kind of practice only weakens the institutions and leads to some forms of politicized policymaking and public administration, economically unsound policies, ineffective policy implementation, and rampant corruption (Alence, 2004; Hopper, 2017). However, these are not the only causes of slow level of human development in Africa. Easterly et al. (2006) and Seyoum (2020) have found that lack of social cohesion also generates lack of successful institutions which frequently promote indecency and undermine fair distribution of public wealth (Easterly et al., 2006; Seyoum, 2020). In short, the causes of the low level of human development in SSA have largely been attributed to lack of economic growth, lack of quality democracy and institutions, high population growth rate, lack of social cohesion, and lack of political stability.

5.1 Discussion of Major Findings

5.1.1 Effect of Multiparty Democracy on Human Development

Multiparty democracies are usually viewed as the most relevant political systems for the acquisition and institutionalization of democracy. Fully established democracies are better destined to cling to equitable development with respect for human rights than authoritarian regimes. This issue was specially addressed by Sen (1999), who has made of freedom the prerequisite and main driver of any form of development. Yet, despite the fact that multiparty democracy looks so crucial in the current development discourse, scholars tend to differ in several ways on whether or not it influences human development.

Until recently, the most commonly held view in this context has been that multiparty democracy ameliorates human development (Gerring et al., 2015; Gerring et al., 2012). That view can be seen in the works of Acemoglu et al. (2014), Acemoglu et al. (2019), Avelino et al. (2005), Brown and Mobarak (2009), Kudamatsu (2012), McGuire (2006), Miller (2015)(2015), Stasavage (2005) for instance; and was premised on the belief that popular participation in government empowers ordinary citizens and would, as a result, lead governments to be more accountable to their interests (Gerring et al., 2015; Gerring et al., 2012; Ross, 2006). Views of this kind were also held by scholars such as Aristotle, Madison, and some present-day political economists for whom it is almost undeniable that democracy serves as a mechanism for redistribution and thus for human development (McGuire, 2006).

Lately however, the commonly held view according to which democracy does influence people's well-being has been fiercely challenged and debunked, with large samples quantitative and qualitative studies conducted to corroborate the absence of a tangible relation between regime type and diverse aspects or measures of human development (Gerring et al., 2015; Gerring et al., 2012; McGuire, 2006; Ross, 2006; Shandra et al., 2004). Thanks to the aforementioned studies, we now know that parts of the most conspicuous ameliorations in people's well-being in the twentieth century have occurred under the tenure of some authoritarian leaders in diverse parts of the world, including SSA, while numerous democratic societies in the developing world in general have been imbued with unrelenting discrepancies in wealth and rampant poverty. In addition, some of the substantiations previously provided to support the idea that democracy influences human development (through the assistance for the poor) seem quite doubtful in view of recent empirical analysis. While most people (obnubilated by the experience of OECD countries) generally believe that democracy would bring about higher social expenditures which in turn would improve the welfare of the poor, it turns out that there is little to no relationship between public spending and human development beyond the context of the OECD countries (Filmer & Pritchett, 1999; McGuire, 2006). Hence, as Gerring et al. (2012, pp. 1-2) indicated that, "the stipulated mechanisms of the welfare state do not lead, at least not in any consistent fashion, to improvement in social welfare as measured by mortality, literacy, and other human development outcomes." In addition to these opposing views, there is growing controversy in Africa about the question of whether multiparty democracy has had or is having tangible effects on the development of the

region. Given that it is impossible to capture all of the dimensions of multiparty democracy and human development, this study decided to examine the hypothesis according to which multiparty democracy exerts a positive influence on human development using respectively four measures of democracy (multiparty democracy 1 and 2, civil liberties, and political rights) and four measures of human development (human development index, infant mortality, life expectancy, and basic drinking water). Overall, the study has found mixed results concerning the effect of multiparty democracy on human development in Sub-Saharan Africa. The results were positive (with relatively low to very little correlation magnitudes in most cases) in the OLS, random effects, fixed effects, and system GMM estimations, where multiparty democracy 1 and 2 appeared to be correlated with two to three measures of human development in each estimation. The positive effect means that multiparty democracy is capable of influencing human development in sub-Saharan Africa. Thus, as multiparty democracy propagates, all other things being equal, human development also expands in the long term. The measures of multiparty democracy (Democ1 and Democ2) seem to support human development and the ability to sustain the human development index, infant mortality, life expectancy, and basic drinking water services. However, the findings have also revealed some negative significant relations as well some non-significant ones. The negative but significant association suggested that multiparty democracy was damping progress toward human development in SSA. In sum, the mixed findings and the low magnitude positive correlation between multiparty development and human development in SSA lends support for the longterm effect of the research hypothesis and is consistent with a large body of the literature (Gerring et al., 2015; Gerring et al., 2012; McGuire, 2006; Ross, 2006; Shandra et al., 2004). which indicated that multiparty democracy exerts little to no influence on human development.

5.1.2 Effect of Social Cohesion on Human Development

With respect to the hypothesis according to which social cohesion has positive effects on human development, the study has found mixed results across the four estimations techniques. The findings revealed that social cohesion consistently had a negative impact on human development through three dependent variables: human development, life expectancy, and basic drinking water in the OLS, random and fixed effects estimations; and through two dependent variables (HDI and BASW) in the system GMM estimation. This meant that the current level of social cohesion does not favor human development in the Sub-Saharan African region. On the other hand, however, the findings have shown that the same variable (social cohesion) had a positive impact on infant mortality and life expectancy (IMR and LEXP) at the 1% and 10% level respectively across the four estimation techniques. Therefore, the positive impact of social cohesion meant that group cohesiveness, equal and fair per capita share or resource distribution within Sub-Saharan African countries, and peace and quality institutions appeared to facilitate the achievement of better life standards. The positive impact of social cohesion on human development was thus in line with the works of Easterly et al. (2006) and Seyoum (2020), who observed that social cohesion had significant long-term effect on quality of life as measured by the human development index, infant mortality, or other measures of well-being. The mixed results of the effect of social cohesion on human development does not contradict the current literature or the research hypothesis since they indicated the existence of a long-term relationship between the two variables. The consistent positive effect of social cohesion on human development through infant mortality and the low magnitude of the relationship are indicators of an indirect long-term association.

5.1.3 Effect of the Interactive between Multiparty Democracy and Social Cohesion on Human Development

Given that multiparty democracy created both opportunities and threats for sub-Saharan African countries, interaction terms were created in order to test whether social cohesion could possibly damp the negative influence of multiparty democracy on human development. The test found that the two measures or variables of the interaction between multiparty democracy and social cohesion (Democ1SC and Democ2SC) had positive effects on two measures of human development (HDI and BASW) while showing a negative impact on infant mortality and no significant association with life expectancy. It is important to note that multiparty democracy 1 has never shown a positive relationship with the human development index, life expectancy, or basic drinking water, as indicated earlier. Yet, when interacting with social cohesion, the sign of the coefficient changed and showed a strong positive association with the human development index, life expectancy, and basic drinking water. These findings suggested that multiparty democracy 1 is likely to exert a positive influence on human development if there is social cohesion. It also means that social cohesion is susceptible to dampening the negative effect of multiparty democracy 1.

It is equally important to note that multiparty democracy 2 has never shown a negative relationship with the human development index, life expectancy, or basic drinking water, again as indicated earlier in the text of the present study. Yet, when interacting with social cohesion, the sign of the coefficient changed and showed a negative association with the human development index, life expectancy, and basic drinking water. These findings seem therefore to suggest that multiparty democracy 2 is likely to exert a positive influence on human development if and only if there is a great deal of social cohesion in the Sub-Saharan African region. The results also meant that social cohesion is the key to human development since the sign of the interaction term between the two variables depends on the sign of the coefficient of social cohesion.

Overall, the findings are mixed as far as the effect of the interaction of multiparty democracy and social cohesion is concerned. Nonetheless, they lent support to the research hypothesis and the author's argument according to which, for multiparty democracy to lead to development, it ought to be associated with social cohesion. Additionally, given the magnitude of the relationship between the interactive effect of multiparty democracy and social cohesion on the measures of human development, that effect could only be a long-term one.

5.2 Contributions

The advantage of this study resides in the fact that it uses four different estimation techniques to determine the effect of multiparty democracy and social cohesion on the well-being of Sub-Saharan African populations. The study has made three essential contributions: to theory, research, and practice.

5.2.1 Theoretical Contributions

A number of theoretical paths were relied on in order to test the hypotheses of this study. These are: the relation developmental systems metamodel (e.g. Lerner's developmental contextualism, and Brandtstadter's action theory of human development), Riker and Shayo's theory of multidimensional redistributive politics, regime type and poverty theory, and social cohesion theory. First, Riker and Shayo's theory of multidimensional redistributive politics and regime type and poverty theory are rooted in the idea of redistribution in politics. While the former theory is used to explicate redistributive outcomes in democracies, and to address the crucial issue of how voters set preferences or a particular identity over election outcomes (Iversen & Goplerud, 2018), the former (regime type and poverty theory) suggests that a democratic system spends more money on welfare benefits for the poor than nondemocratic regimes. Hence, in the view of several scholars, democracies spend more on services and public goods because they are compelled to by the electoral process, while nondemocratic governments face no such constraint. Another set of prodemocracy scholars among whom are Bueno de Mesquita et al. (2005) and Ghobarah et al. (2004), added that it is because democratic governments have a wider range of supporters to attend to that they are forced to provide more public goods and services rather than private provisions. Probably the most preponderant version of this discourse comes from Meltzer and Richard (1981) who developed a seminal framework on the distributional effects of democracy (Ross, 2006). In their model, democratization takes place when political rights are extended from wealthy families or the elites to the rest of the citizenry. As the right to vote expands, stated Meltzer and Richard (1981), the position of the median or say the decisive voter, whose preferences shape government policies, shifts down in the income distribution (Ross, 2006). Under universal suffrage, explained the authors, the median voter is likely to earn a "median income" when income is unevenly shared. However, as indicated above, the median income is less than the mean income; and since the decisive voter, in this context the poor or median voter, earns less than the average income, he or she tends to favor a higher tax rate and more income distribution (2006). In short, democracy brings more people with below-average incomes to the polls, and together, they force the government to redistribute income downwards (Ross, 2006) From this

theoretical perspective, one of the prior assumptions of this study was that if democracy does indeed favor redistribution which in turn leads to more government spending and more income for the poor, then multiparty democracy should have a positive impact on human development, especially in Sub-Saharan African countries. In fact, the findings of the study revealed some long-term effects or distal relationships between the two variables and contributes therefore to Riker and Shayo's multidimensional redistributive politics theory and that of regime type and poverty. The study revealed that the effects of multiparty democracy on human development in Sub-Saharan Africa showed mixed results, but human development is highly persistent in the region. Since most countries in SSA that have high human development outcomes also have high democracy scores, this study partially agrees with the discussed theories. Hence, multiparty democracy was proven to be so crucial for human development in countries included in the sample of this study.

Second, social cohesion is a much-debated concept and its definition is subject to controversy. Hence, in order to be clear in this study, social cohesion was defined as "the nature and extent of social and economic divisions within a society" (Easterly et al., 2006, p. 105). Those fractionalizations, either through ethnic considerations, language, politics, income class, or other features of human organizations, represent channels through which considerable societal divisions can erupt (Easterly et al., 2006). As such, a socially cohesive society may not be one that is homogenous, but rather one that has fewer personal advantages or power that individuals or groups could utilize, and this could exacerbate social dividing lines that could split the society into relatively homogenous subgroups (Easterly et al., 2006). Proponents of the theory have consistently argued that social cohesion has the potential to foster effective institutions, lower economic and social divisions, and lead to economic growth and ultimately improve the quality of life. From this theoretical ground, one of the prior assumptions of this study was that if social cohesion does foster quality institutions which in turn leads to economic growth, which is prerequisite for people's well-being, then social cohesion should have a positive effect on human development. In fact, the study has found a distal relationship between the aforementioned variables and therefore contributes to the theory of social cohesion.

Third, the relation developmental systems metamodel (e.g. Lerner's developmental contextualism and Brandtstadter's action theory of human development) stresses the basic approach of human development as consisting of symbiotic interrelations between individuals and their entangled environment (Lerner et al., 2015; Overton, 2015). RDS-based theories do in fact paint a fundamental developmental process as entailing associations among the varying levels of the organizational contexts that constitute the pattern of human well-being.

In a nutshell, the developmental contextualism theory mirrors "the idea of dynamic interaction, levels of integration, and self-organization associated with other instances of open, living, developmental system theories of human development" (Lerner et al., 2015, p. 19). Since individuals act on the context which in return acts on them, they are said to be the effective enablers of their proper emergence (Lerner et al., 2015). Individual and context relations therefore enable individuals to engage in "circular functions" that provide a basis for their contribution to the construction of their own developmental system (Lerner et al., 2015).

Applied to the context of this study, relation developmental systems theories suggest that individual Sub-Saharan Africans (elites, politicians and common people) are effective conceivers of their own progress which occurs through an entangled individual-context mechanism. Multiparty democracy may not be conducive to an African setting, yet, had the population come together to handle the situation in a symbiotic manner, the region would have gotten along with the vicissitudes and other adverse effects that the democratization of the region has engendered. Prior to the inception of democracy in Sub-Saharan Africa, there was a low-level of cohesion among the ethnic groups. So, the prime role of the political leaders of the region should have been to foster social cohesion among the different ethnic groups in order to improve their life condition. Hence, the argument of this study was that, for multiparty democracy to lead to human development in SSA, it ought to be followed by social cohesion, which in turn would lead to the quality institutions and economic growth needed to yield socio-economic and human development. In other words, given the challenges of multiparty democracy which has brought about ethnic politics and social discords, lack of social cohesion, and quality institutions in SSA, it is likely that its interaction with social cohesion will have a positive effect on human development.

Though the study found mixed results as far the effects of the interaction between multiparty democracy and social cohesion is concerned, the findings nevertheless lent support to the prior assumptions and argument of this study. The results consistently showed that the interaction between multiparty democracy and social cohesion has a positive long-term effect on human development in the SSA countries that were included in the study. Thus, when interacting, multiparty democracy and social cohesion were found to be very relevant to human development in SSA. Such findings are a contribution to the developmental contextualism theory.

5.2.2 Contribution to Research

This study addresses the shortcomings in the democracy and development literature. Early studies on the relationship between the two concepts have persistently maintained that democracy has an immediate and unequivocal effect on human development. These threads of literature emphasized the idea that popular participation in government empowers ordinary citizens and, as a result, leads governments to be more accountable to the interests of the people (Gerring et al., 2012). For the proponents of this line of thought, democracy serves as a mechanism for redistribution, and thus for human development since it brings about fairer income distribution and higher social expenditures which they suppose would improve the welfare of the poor. However, a close analysis of 35 SSA countries has revealed that although these countries have been democratized for the last 30 years, they are still far from sustained human development for the majority of them. That was one of the reasons why other scholars have called for caution and have argued that there is little to no relationship between public spending and human development beyond the context of the OECD countries (Filmer & Pritchett, 1999; McGuire, 2006). As Gerring et al. (2012, pp. 1-2) indicated, "the stipulated mechanisms of the welfare state, they said, do not lead, at least not in any consistent fashion, to an improvement in social welfare as measured by mortality, literacy, and other human development outcomes."

Consequently, this study has examined the effect of multiparty democracy on human development and has found a deficiency in the mainstream literature and the push for multiparty democracy in SSA as a short cut to human development. In order to contribute to the literature on multiparty democracy and human development, this study offers a hands-on model of democratic reform implementation that goes beyond the current models advocated in the existing studies. This conceptual model has the potential to enable future researchers in general to comprehend how and why democracy and human development remain so challenging to African countries. The proposed model stipulates that any political change, no matter who advocates it or how diligent it looks, needs to first begin by consolidating social cohesion if it is to be successful. Social cohesion was proven to have a tangible distal effect on human development, especially in the context of SSA. This study also contributes to discussions in the foreign assistance literature by improving upon existing studies, which has failed to include the nature of African politics in their analysis. In fact, the quantitative aid studies are only heedful of the effects of foreign assistance on democratic development in recipient countries after elections are organized. Few attempts have been made to go beyond ordinary political games in order to grasp the organization of the African political system, the neo-patrimonial character, ethnic and communal considerations, and their effect on the accomplishment of tangible human development.

5.2.3 Contributions to Practice

The findings of the present study have some implications for international development and democratic reform policies for the Sub-Saharan African region. The transition from autocracy or anocracy to fully established democracy clearly indicated that all regions of the world have substantially improved in human development with the exception of Sub-Saharan Africa. The procedural aspect of African democracy takes part of the blame for the failure of the multiparty system to yield tangible development in the region, as it exhibits a decline in quality democratic institutions, with the preponderance of executive branches in decision-making. Moreover, the political party structures are relatively weak or non-existent, and so are the legislatures in SSA, and there are no political commitments to electoral reform. Some

experts have affirmed that Sub-Saharan African democracy and the democracy on the continent in general are evolutionary democracy as opposed to the revolutionary approach. Political party structures and national institutions are still weak while party leaders are strong. Apart from the procedural nature of African politics, one could add the nature of Sub-Saharan African politics, which is essentially neo-patrimonial and messy. Neopatrimonialism co-exists with democracy to produce boundless patronclient systems in which the patrons (big-men) enjoy public resources within their circles of clients (Fukuyama, 2015), as indicated earlier. Most contributions in the current literature on African politics blame neopatrimonialism for the continent's disappointing economic records and the large discrepancies between governments' political enticements and the demand for steady development (Hopper, 2017).

The findings of this study provide more incitement for both national and international policymakers to come up with direct policies, aiming both at institutional and development reforms. This is supposed to help tackle institutional (democracy) ineffectualness, the low-level social cohesion that impedes the progress of most Sub-Saharan African countries toward sustained human development. Most contributions in the existing literature have seemingly ignored other global and national factors that are directly or indirectly tied to the lack of the quality democracy and social cohesion required in most countries in SSA to move forward economically and socially. This study attempted to examine the national level factors, such as regime type (democracy), social cohesiveness, GDP growth and per capita share, population growth, political stability, as well as the influence of the foreign financial assistance in relation to local institutions. In so doing, this dissertation shed more light on and contributed to the current literature.

5.3 Limitations and Implications for Future Research

Several challenges have affected the timely completion of this study. The first one was dealing with the data collection. In longitudinal research designs, it is strongly suggested to use a large sample in order to achieve outstanding results. In this contribution, that was a challenging task since in Sub-Saharan Africa data are not easily available. This challenge constrained the scope of the study as well as its smooth completion. Nonetheless, with an inclusive sample of 35 countries out of a population of 46, 882 observations, and the use of advanced statistical tools such as the system generalized method of moments estimation technique (system GMM), the study yielded reliable results. The second challenge is related to funding and time. Panel data research studies require the use of data from various sources. Yet, in the context of this study, some data were not free since they come with a fee. That situation caused a great financial burden and delays as a result.

Based on the above-mentioned challenges, several pathways were uncovered for subsequent research in the field of democracy and development study. First of all, prospective studies could ameliorate the extant literature by conducting case studies that reassess country-specific characteristics. Since the present study is based on cross-sectional time series analysis, it is possible that critical country-level specificities that are crucial for human development may not be addressed even though some statistical techniques were used to control for such possibilities. Hence, conducting further studies which will provide more insights at the state or country level, will be of great contribution to the literature on multiparty democracy and human development. It is therefore suggested for prospective studies to use other time series analysis methods such as the cointegration tests or the autoregressive distributed lag model in order to successfully explore the specific country issues that may scape to the present study. Future studies could replicate the present study by using different indices as a measure of multiparty democracy, social cohesion, and human development at different time spans and geographical settings. This is so important as the use of different data and measures can offer different results.

Studies on the linkage between multiparty democracy and human development are reemerging. Therefore, it is crucial for subsequent studies to refocus on these strands of research investigation. Such studies should also look into the interaction between multiparty democracy and social cohesion in order to examine whether sufficiently high level of social cohesion could damp the negative influence of multiparty democracy on other human development measures, such as urbanization, nighttime lights, or gender equality. Further studies in this regard would contribute to the debate on multiparty democracy and human development. Moreover, the present study discussed the effect of multiparty democracy and social cohesion on human development from political, social, and economic perspectives. It is worth noting however, that the environment has played a significant role in the recent wave of human development given that challenges such as the climate crisis and the global heating are menacing human survival. Consequently, prospective studies should consider the environmental dimension of human development in their judgement. Prospective studies should also consider using a qualitative or mixed-method approach into their probes on possible linkages between multiparty democracy and human development. A major limitation of this study was its inability to gather primary data through semi-structured interviews conducted with key officials from the relevant governments and the supranational organizations such the United Nations or the African Union. Interviews of this kind would have improved our understanding of how countries were performing with respect to efforts aimed at achieving sustained human development in Sub-Saharan Africa.

5.4 Conclusion

This study examined the effect of multiparty democracy and social cohesion on human development. Overall, the following results were established after controlling for confounding factors. First, multiparty democracy, which was measured by political rights, civil liberties, and democracy indices from the Freedom House and Polity 5, showed a positive but distal relationship with human development in the Sub-Saharan African region. Second, social cohesion also indicated a positive but distal relationship with human development. Third, the interaction between multiparty democracy and social cohesion exerts a positive long-term effect on human development in Sub-Saharan Africa.
Hypotheses	Conclusion
H1: Multiparty democracy has a positive	Mixed results but the hypothesis was
effect on human development.	partially confirmed (the long-term
	effect)
H2: Social cohesion has a positive effect	Mixed results but the hypothesis was
on human development.	partially confirmed. The relationship
	was distal rather than proximal.
H3: The interaction between multiparty	Mixed results but the hypothesis was
democracy and social cohesion has a	partially confirmed (the long-term
positive effect of human development	effect was confirmed)

Table 5.1 Conclusion Based on the Hypothesis Testing

5.5 Recommendations

From a multiparty democracy perspective, the fact that most countries in the Sub-Saharan African region are still poor and are unable to guarantee economic prosperity and sustained human development for themselves despite their democratic credentials does not mean that multiparty democracy as a regime type is incapable of alleviating poverty or ensuring higher quality life. Yet, in order for human well-being in the Sub-Saharan African region to be sustained, power must absolutely rest in the people. It is when the masses are allowed to participate in the governance process that accountability can be strengthened, resources may be equitably distributed, and the inequality gap between the rich and the poor can be reduced. Therefore, it is crucial for countries in the Sub-Saharan region to ensure broader political rights and civil liberties for their people. The findings of the study suggested that civil liberties and political rights have a more negative influence on human development in that region. This is particularly due to the nature of African democracy, which is elitist, neopatrimonial, and ethnic. Most contributions in the literature on African politics blame neopatrimonialism and ethnicity for the continent's disappointing human development record and the large discrepancies between governments' political enticements and the demands for steady development. In order to help improve the quality of SSA

democracy and to help it have a better impact on human development, important institutional reforms should be considered and the ethnic and neo-patrimonial nature of the democracy addressed. For instance, to deal with the ethnic character of democracy, other types of political systems such as the one-party system or party-less democracy should be considered. Both political systems have the potential to unite the people around party ideology or leaders, without respect to their ethnic or linguistic cleavages. Moreover, real power needs to be given to the people to elect the leaders of their choice on the basis of criteria purposefully set by themselves. In order to address the neo-patrimonial character of SSA democracy then, the current weak political party structures and national institutions should be above party and state leaders rather than the contrary. Elections should be conducted locally and each region should send its delegates to the federal government. The task of the central or federal government should be to receive, coordinate, and execute the different decisions that emanate from the lower echelon entities or decision-making bodies. Party structures are crucial in politics, as they help to determine the status, role, and liability of all members. Beyond party structure, the same adjustment should be done with regards to the three basic state institutions, which are the state itself, the rule of law, and accountability (Fukuyama, 2011; Matlosa et al., 2017) as indicated earlier. Though these institutions are distinct from each, they are incapable of guaranteeing that the state is impartial, that the rule of law is vigorous and equitable, and that accountability is exercised in all its forms (Fukuyama, 2011; Matlosa et al., 2017).

From a social cohesion standpoint, some urgent policy recommendations are made with the hope to achieve sustainable human development. For countries in the Sub-Saharan African region to make progress on the path of human development, leaders should take significant steps toward good governance that would include consolidation of peace, stability, and security. Especially, political commitment should aim at improving institutional quality, adequate and equal per capita share, and political stability. These indicators have consistently revealed a more negative influence on human development than a positive impact on it in SSA. As for institutional quality, governments in Sub-Saharan Africa should expend more resources in order to ensure quality delivery of public services through improvements in civil service without political interference and manipulation. These improvements will ensure that public bureaucracy is susceptible to formulating and implementing sound policies that will aim at reducing poverty and increasing human development opportunities. Though the donor community and the Bretton Wood Institutions constantly urge developing countries to rely on neoliberal market policies for efficient resource allocation, this study firmly recommends a state-led approach as a means to promote sustainable economic growth and human development in the Sub-Saharan African region. Yet, state-led approaches should not be understood as those that are repressive or restrictive of press freedom or peoples' participation in political processes. Rather, it is the discretion of the government to exert influence over policy space rather than being controlled and dictated to by external players such as the Bretton Woods institutions. Under the neoliberal market force, most countries in Africa have lost control over their policy space and as a result, they seem to lack the capacity to initiate home-grown policies that internalize domestic norms and values rather than reflecting a western style of governance. The countries in Sub-Saharan Africa can and should strengthen their governance structure through the determination of what works best for Africa and African people rather than blindly copying the Western world. In brief, policymaking may have a standard procedure, but such practices should be exercised according to African norms and values. The study further recommends sound public bureaucracy retooling in Africa, including some effectual reforms with regards to public bureaucracy promotion with merit and fairness. Hence, the current practice where politicians manipulate the civil service and eventually cause favoritism and patrimonial practices should be banished. Finally, Sub-Saharan African countries need to take urgent measures to regulate the fast rate at which their population is growing. The findings of the study indicated that population growth exerts a negative effect on human development. The 2019 UN Population Projections indicated that by 2100 the total population in Africa is expected to reach four (4) billion, as stated earlier. Clearly, population size in Africa is becoming a burden, especially when it is apparent that there is no commensurate economic growth to accommodate the surge. Consequently, it is more difficult to reduce poverty and inequality, to expand health and education facilities, and to combat hunger and malnutrition. Ultimately, policies that seek to control population growth should be pursued vigorously.

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APPENDICES

Appendix A: Research Choice and Philosophy Table

Topic:	Multiparty Democracy a	and Human Development
Paradigm:	Positivist	Interpretivist
Approach	Objective Deductive	Subjective Inductive
Methodology	Quantitative	Qualitative
	• Influenced by psychological research traditions	• Influenced by anthropological research traditions
	• Focuses on designing experiments, using statistics and measurement to test	• Focuses on a particular event, process, institution, or a group of people
	Numerical reporting	 Rich contextual descriptions Qualitative analysis
	Quantitative analysis Emphasizes explaining	• Emphasizes understanding
Method:	Scientific theory	Non-Science/Pseudoscience
	• Unbiased	• Ignores facts
	Falsifiable Penroducible	• Does not follow any scientific method
	• Kepi ouucioie	• Not logically consistent
Ethics	Extrinsic	Intrinsic
Quality standards	Prevailing benchmarks of rigor: objectivity, internal and external validity, reliability	Congruence of experiential, presentational, propositional and practical knowledge

(Chosen research path printed in bold)

Appendix B: Human Development Index Scores for the Sample of Interest, 1995-2019

	1995	2000	2005	2010	2015	2019
Angola		0.400	0 459	0.517	0 572	0 5 9 1
Aligoia Benin	0.300	0.400	0.456	0.317	0.372 0.532	0.301
Botswana	0.390	0.410	0.433	0.494	0.332	0.345
Burkina Faso	0.577	0.203	0.022	0.005	0.717 0.422	0.755
Burundi	0.200	0.275	0.355	0.30+	0.422 0.437	0.432
Cameroon	0.277	0.300	0.333 0.472	0.411	0.437	0.455
Cape Verde	0.444	0.440	0.472	0.505	0.54)	0.505
Central Africa	0.320	0.307	0.000	0.052	0.050	0.005
Comoros	0.32)	0.325	0.343	0.505	0.575	0.554
Republic of Congo	0.480	0.461	0.400	0.521	0.540	0.554
Cote D'Ivoire	0.400	0.401	0.470	0.520	0.500	0.574
Equatorial Guinea	0.412	0.421 0.525	0.550	0.400	0.505	0.550
Fritrea		0.525	0.550	0.376	0.307 0.454	0.372
Gabon	= 0.617	0.621	0.636	0.652	0.191	0.703
Ghana	0.479	0.021	0.529	0.052	0.590	0.703
Guinea	0.311	0.340	0.378	0.303	0.350	0.011
Guinea-Bissau	0.511	0.510	0.570	0.436	0.157	0.480
Kenya	0.471	0.461	0.506	0.551	0.587	0.601
Lesotho	0.478	0.459	0.460	0.460	0.503	0.527
Liberia	0.170	0.435	0.445	0.455	0.477	0.480
Madagascar		0.462	0.486	0.511	0.522	0.528
Malawi	0.360	0.388	0.409	0.431	0.468	0.483
Mali	0.273	0.312	0.360	0.408	0.417	0.434
Mauritania	0.430	0.464	0.484	0.505	0.536	0.546
Mauritius	0.651	0.678	0.714	0.751	0.789	0.804
Mozambique	0.267	0.307	0.354	0.401	0.433	0.456
Namibia	0.562	0.544	0.566	0.589	0.638	0.646
Niger	0.241	0.262	0.296	0.331	0.372	0.394
Senegal	0.383	0.390	0.429	0.468	0.506	0.512
Sierra Leone	0.291	0.295	0.347	0.399	0.431	0.452
South Africa	0.629	0.631	0.647	0.664	0.701	0.709
Tanzania	0.379	0.390	0.435	0.481	0.514	0.529
Togo	0.416	0.427	0.446	0.466	0.499	0.515
Zambia	0.423	0.425	0.476	0.527	0.569	0.584
Zimbabwe	0.454	0.430	0.456	0.482	0.553	0.571

Source: Human Development Report 2020 and author's calculation

* Less than 0.550 = low human development

* 0.550–0.699 = medium human development

* 0.700–0.799 = high human development

* 0.800 or greater = very high human development

Appendix C: Infant Mortality Estimates for the Sample of Interest, 1995-2019

	1995	2000	2005	2010	2015	2019
A	120.0	100.00	100 (2	95.56	CA 14	52.0
Angola	130.8	126.02	109.62	85.56	64.14	52.8
Benin	95.2	89.76	80.7	/3.14	66.8	61.05
Botswana	39.1	35.16	25.56	22.34	29.16	32.52
Burkina Faso	97.2	93.66	85.42	73.06	62.82	55.97
Burundi	106.1	100.22	85.36	66.44	50.68	41.97
Cameroon	89.8	89.36	81.8	72.84	62.12	52.65
Cape Verde	44	37.1	25.44	22.92	19.08	14.1
Central Africa	113.3	111.6	108.46	103.32	94.16	84.32
Comoros	76.6	73.5	71.04	65.22	57.16	50.45
Republic of Congo	67	71.64	63.98	47.36	40.32	36.2
Cote D'Ivoire	101.8	98.26	89.4	78.92	69	61.32
Equatorial Guinea	116.5	111.78	99.3	84.98	72.5	63.2
Eritrea	72.6	62.04	49.84	41.82	35.92	31.77
Gabon	57.3	55.48	50.52	44.18	37.92	32.75
Ghana	72.4	68	58.08	50.38	41.88	35.6
Guinea	118.4	107.26	89.9	77.94	70.92	65.65
Guinea-Bissau	118.2	110.1	95.3	78.56	63.74	54.8
Kenya	67.6	63.3	52.98	42.14	37.22	33.27
Lesotho	70.4	73.06	76.68	76.26	71.9	70.3
Liberia	164	142.54	104.1	78.14	68.28	63.75
Madagascar	82.9	74.12	60.42	49.94	42.9	38.02
Malawi	119.1	109.14	77.7	57.5	43.02	32.95
Mali	111.8	106.12	93.34	81.12	70.7	62.67
Mauritania	69.4	69.34	68.32	64.08	57.66	52.97
Mauritius	19.9	18.94	14.08	12.8	12.88	13.5
Mozambique	144.4	125.24	95.94	76.7	64.92	57.22
Namibia	46.3	45.9	42.78	37.16	35.74	31.57
Niger	115.3	103.72	86.2	68.2	55.42	48.55
Senegal	71	69.96	59.16	46.38	38.68	34.02
Sierra Leone	149.7	144	131.08	114.46	97.96	84.7
South Africa	43.8	45 38	47.4	40.54	29.4	27.92
Tanzania	93.5	85.76	66.2	51 44	43.22	37 77
Togo	83	78.1	68.08	60.76	53 46	47.62
Zambia	101.4	95.12	74.3	56.22	48 76	43.92
Zimbabwe	55.5	53.76	51 52	55 44	46.5	39.92
Linibuowo	55.5	55.10	51.52	55.77	10. 5	57.7

* Source: World Bank's World Development Indicators (2021)

* Mortality Rate, Infant (per 1000 live births)

Appendix D: Life Expectancy Estimates for the Sample of Interest, 1995-2019

1995	2000	2005	2010	2015	2019
45.24	45.84	48.52	53.24	57.95	60.35
55.2	55.20	56.56	58.60	60.09	61.17
54.41	52.01	50.86	56.74	64.79	68.75
49.44	49.96	52.02	55.59	58.88	60.76
46.75	47.84	51.66	55.70	59.09	60.88
51.55	50.99	51.94	54.15	56.57	58.49
66.22	67.54	69.84	70.79	71.66	72.56
46.53	44.95	44.29	46.19	49.39	52.21
58.72	59.25	59.77	61.11	62.88	63.90
52.58	52.03	53.93	58.39	61.97	63.93
51.56	50.30	49.68	51.72	54.87	56.99
51.18	52.49	54.03	55.09	56.64	56.64
52.31	54.11	57.23	60.89	63.70	65.52
60.17	59.05	57.91	59.95	63.58	65.80
57.52	57.11	57.85	60.17	62.06	63.45
51.74	51.45	52.07	55.53	58.46	60.68
48.65	49.65	51.50	53.63	56.07	57.66
53.48	51.62	52.66	58.63	63.36	65.87
55.78	51.01	44.13	43.61	48.63	52.89
48.31	50.54	53.68	58.11	61.19	63.27
54.61	56.98	60.20	62.50	64.69	66.30
45.84	45.32	46.28	52.26	59.74	63.24
46.57	47.22	50.38	54.11	56.58	58.44
60.42	60.59	61.03	62.02	63.36	64.45
70.32	70.78	72.10	72.68	73.93	74.43
47.12	48.19	49.86	51.38	55.03	59.25
58.47	54.57	50.87	53.97	60.3	63
46.64	48.61	51.97	55.75	59.40	61.58
57.4	57.46	59.32	62.84	65.87	67.37
37.08	38.14	42.42	47.47	51.65	53.65
61.56	58.31	54	55.54	60.92	63.51
49.28	49.93	52.87	56.80	61.35	64.44
54.75	53.82	54	56.21	59.08	60.48
44.24	43.63	46.43	52.65	59.58	63
50.48	46.64	43.40	46.87	56.55	60.76
	$\begin{array}{c} \textbf{1995} \\ 45.24 \\ 55.2 \\ 54.41 \\ 49.44 \\ 46.75 \\ 51.55 \\ 66.22 \\ 46.53 \\ 58.72 \\ 52.58 \\ 51.56 \\ 51.18 \\ 52.31 \\ 60.17 \\ 57.52 \\ 51.74 \\ 48.65 \\ 53.48 \\ 55.78 \\ 48.31 \\ 54.61 \\ 45.84 \\ 46.57 \\ 60.42 \\ 70.32 \\ 47.12 \\ 58.47 \\ 46.64 \\ 57.4 \\ 37.08 \\ 61.56 \\ 49.28 \\ 54.75 \\ 44.24 \\ 50.48 \end{array}$	19952000 45.24 45.84 55.2 55.20 54.41 52.01 49.44 49.96 46.75 47.84 51.55 50.99 66.22 67.54 46.53 44.95 58.72 59.25 52.58 52.03 51.56 50.30 51.18 52.49 52.31 54.11 60.17 59.05 57.52 57.11 51.74 51.45 48.65 49.65 53.48 51.62 55.78 51.01 48.31 50.54 54.61 56.98 45.84 45.32 46.57 47.22 60.42 60.59 70.32 70.78 47.12 48.19 58.47 54.57 46.64 48.61 57.4 57.46 37.08 38.14 61.56 58.31 49.28 49.93 54.75 53.82 44.24 43.63 50.48 46.64	199520002005 45.24 45.84 48.52 55.2 55.20 56.56 54.41 52.01 50.86 49.44 49.96 52.02 46.75 47.84 51.66 51.55 50.99 51.94 66.22 67.54 69.84 46.53 44.95 44.29 58.72 59.25 59.77 52.58 52.03 53.93 51.56 50.30 49.68 51.18 52.49 54.03 52.31 54.11 57.23 60.17 59.05 57.91 57.52 57.11 57.85 51.74 51.45 52.07 48.65 49.65 51.50 53.48 51.62 52.66 55.78 51.01 44.13 48.31 50.54 53.68 54.61 56.98 60.20 45.84 45.32 46.28 46.57 47.22 50.38 60.42 60.59 61.03 70.32 70.78 72.10 47.12 48.19 49.86 58.47 54.57 50.87 46.64 48.61 51.97 57.4 57.46 59.32 37.08 38.14 42.42 61.56 58.31 54 49.28 49.93 52.87 54.75 53.82 54 44.24 43.63 46.43 50.48 46.64 43.40 </td <td>1995200020052010$45.24$$45.84$$48.52$$53.24$$55.2$$55.20$$56.56$$58.60$$54.41$$52.01$$50.86$$56.74$$49.44$$49.96$$52.02$$55.59$$46.75$$47.84$$51.66$$55.70$$51.55$$50.99$$51.94$$54.15$$66.22$$67.54$$69.84$$70.79$$46.53$$44.95$$44.29$$46.19$$58.72$$59.25$$59.77$$61.11$$52.58$$52.03$$53.93$$58.39$$51.56$$50.30$$49.68$$51.72$$51.18$$52.49$$54.03$$55.09$$52.31$$54.11$$57.23$$60.89$$60.17$$59.05$$57.91$$59.95$$57.52$$57.11$$57.85$$60.17$$51.74$$51.45$$52.07$$55.53$$48.65$$49.65$$51.50$$53.63$$53.48$$51.62$$52.66$$58.63$$55.78$$51.01$$44.13$$43.61$$48.31$$50.54$$53.68$$58.11$$54.61$$56.98$$60.20$$62.50$$45.84$$45.32$$46.28$$52.26$$46.57$$47.22$$50.38$$54.11$$60.42$$60.59$$61.03$$62.02$$70.32$$70.78$$72.10$$72.68$$47.12$$48.19$$49.86$$51.38$$58.47$$54.57$$50.87$$53.97$<t< td=""><td>19952000200520102015$45.24$$45.84$$48.52$$53.24$$57.95$$55.2$$55.20$$56.56$$58.60$$60.09$$54.41$$52.01$$50.86$$56.74$$64.79$$49.44$$49.96$$52.02$$55.59$$58.88$$46.75$$47.84$$51.66$$55.70$$59.09$$51.55$$50.99$$51.94$$54.15$$56.57$$66.22$$67.54$$69.84$$70.79$$71.66$$46.53$$44.95$$44.29$$46.19$$49.39$$58.72$$59.25$$59.77$$61.11$$62.88$$52.58$$52.03$$53.93$$58.39$$61.97$$51.56$$50.30$$49.68$$51.72$$54.87$$51.18$$52.49$$54.03$$55.09$$56.64$$52.31$$54.11$$57.23$$60.89$$63.70$$60.17$$59.05$$57.91$$59.95$$63.58$$57.52$$57.11$$57.85$$60.17$$62.06$$51.74$$51.45$$52.07$$55.53$$58.46$$48.65$$49.65$$51.50$$53.63$$56.07$$53.48$$51.62$$52.66$$58.63$$63.36$$55.78$$51.01$$44.13$$43.61$$48.63$$48.31$$50.54$$53.68$$58.11$$61.19$$54.61$$56.99$$61.03$$62.02$$63.36$$70.32$$70.78$$72.10$$72.68$$73.93$<t< td=""></t<></td></t<></td>	1995200020052010 45.24 45.84 48.52 53.24 55.2 55.20 56.56 58.60 54.41 52.01 50.86 56.74 49.44 49.96 52.02 55.59 46.75 47.84 51.66 55.70 51.55 50.99 51.94 54.15 66.22 67.54 69.84 70.79 46.53 44.95 44.29 46.19 58.72 59.25 59.77 61.11 52.58 52.03 53.93 58.39 51.56 50.30 49.68 51.72 51.18 52.49 54.03 55.09 52.31 54.11 57.23 60.89 60.17 59.05 57.91 59.95 57.52 57.11 57.85 60.17 51.74 51.45 52.07 55.53 48.65 49.65 51.50 53.63 53.48 51.62 52.66 58.63 55.78 51.01 44.13 43.61 48.31 50.54 53.68 58.11 54.61 56.98 60.20 62.50 45.84 45.32 46.28 52.26 46.57 47.22 50.38 54.11 60.42 60.59 61.03 62.02 70.32 70.78 72.10 72.68 47.12 48.19 49.86 51.38 58.47 54.57 50.87 53.97 <t< 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50.99 51.94 54.15 56.57 66.22 67.54 69.84 70.79 71.66 46.53 44.95 44.29 46.19 49.39 58.72 59.25 59.77 61.11 62.88 52.58 52.03 53.93 58.39 61.97 51.56 50.30 49.68 51.72 54.87 51.18 52.49 54.03 55.09 56.64 52.31 54.11 57.23 60.89 63.70 60.17 59.05 57.91 59.95 63.58 57.52 57.11 57.85 60.17 62.06 51.74 51.45 52.07 55.53 58.46 48.65 49.65 51.50 53.63 56.07 53.48 51.62 52.66 58.63 63.36 55.78 51.01 44.13 43.61 48.63 48.31 50.54 53.68 58.11 61.19 54.61 56.99 61.03 62.02 63.36 70.32 70.78 72.10 72.68 73.93 <t< td=""></t<>

- * Source: World Bank's World Development Indicators (2021)/World Populations Prospects 2019
- * Number of years that an infant will spend in life, all others things being equal

Appendix E: Basic Drinking Water Estimates for the Sample of Interest, 1995-2019

	1995	2000	2005	2010	2015	2019
Angola	•••	41.14	44.33	48.76	52.74	55.46
Benin		61.45	62.45	64.08	65.52	66.36
Botswana		75.19	75.92	80.27	86.42	89.86
Burkina Faso		54.91	54.1	51.77	49.49	48.07
Burundi		50.66	52.38	55.32	58.34	60.51
Cameroon		59.17	59.64	60.13	60.24	60.26
Cape Verde		78.77	79.50	81.92	84.58	86.78
Central Africa		58.26	55.20	50.06	46.26	46.33
Comoros		90.94	89.16	85.03	81.14	80.15
Republic of Congo		57.15	58.78	63.76	69.04	72.69
Cote D'Ivoire	1	70.76	71.18	71.84	72.63	72.81
Equatorial Guinea	2.5	51.09	53.40	58.22	63.24	64.54
Eritrea	Y .	46.81	47.78	49.50	50.74	51.84
Gabon		79.53	81.18	83.33	84.82	85.69
Ghana		64.46	67.34	72.54	77.39	80.94
Guinea		62.73	63.02	63.09	62.62	61.99
Guinea-Bissau	\/ <i>;</i>	53.37	55.91	60.06	64.11	66.56
Kenya		47.31	49.47	52.98	56.32	58.59
Lesotho	()	67.46	67.49	67.77	68.26	68.63
Liberia	\ /	62.17	64.75	68.18	70.89	72.69
Madagascar		35.76	38.53	43.83	49.59	53.79
Malawi	(\ldots)	52.94	55.78	60.47	65.12	68.37
Mali		48.74	53.99	62.80	71.67	77.42
Mauritania		40.99	45.42	54.19	63.27	69.76
Mauritius		99.27	99.40	99.63	99.83	99.86
Mozambique		19.89	25.39	35.69	46.72	54.56
Namibia	4 2	76.66	77.62	79.42	81.18	82.37
Niger	1 A	35.66	38.53	42.99	47.13	49.88
Senegal)	59.91	63.41	69.61	75.78	80.06
Sierra Leone		39.88	42.75	49.31	55.77	60.18
South Africa		84.5	86.10	88.65	90.97	92.47
Tanzania		27.25	31.72	40.25	49.28	55.78
Togo		45.88	49.34	55.03	60.66	64.57
Zambia		49.48	51.37	54.58	57.54	59.59
Zimbabwe		71.72	71.03	68.53	65.98	64.28

* Source: World Bank's World Development Indicators (2021)

* Percentage of people using at least basic water services

Appendix F: Freedom House Democracy Scores for the Sample of Interest, 1995-2019

	1995	2000	2005	2010	2015	2019
Angola	6.4	6	5.7	5.5	5.5	5.8
Benin	3	2.1	2.2	2	2	2
Botswana	1.9	2	2	2.1	2.5	2.5
Burkina Faso	5	4.4	4.1	4	4.1	3.5
Burundi	6.4	6.6	5.5	4.4	5.1	6.5
Cameroon	5.7	6.1	6.1	6	6	6
Cape Verde	2.4	1.5	1.3	1	1	1
Central Africa	4.7	3.7	5	4.8	5.8	7
Comoros	3.9	4.4	4.6	3.7	3.5	3.6
Republic of Congo	4.2	5.1	4.7	5.4	5.5	5.8
Cote D'Ivoire	5.2	5.3	5.5	5.9	5.3	4
Equatorial Guinea	6.9	7	6.5	6.7	7	7
Eritrea	6.5	5.2	6.4	6.6	7	7
Gabon	4.1	4.5	4.5	5.1	5.5	5.7
Ghana	5.1	3.3	2.3	1.5	1.5	1.5
Guinea	5.5	5.5	5.5	5.8	5	4.8
Guinea-Bissau	5.1	3.7	4.5	3.9	4.8	4.8
Kenya	5.6	6	4.2	3.4	3.8	4
Lesotho	4.6	4	3.1	2.6	2.7	3
Liberia	6.5	5.3	5.6	3.6	3.5	3.2
Madagascar	3.6	3	3.1	3.7	4.7	3.5
Malawi	5.5	2.6	3.6	3.8	3.5	3
Mali	3.7	2.7	2.3	2.3	4	4.3
Mauritania	6.6	5.8	5.3	4.9	5.5	5.5
Mauritius	1.7	1.5	1.4	1.4	1.5	1.5
Mozambique	5.1	3.5	3.5	3.3	3.5	4
Namibia	2.4	2.5	2.5	2	2	2.1
Niger	4.6	5.4	3.8	3.5	3.7	3.8
Senegal	3.9	4.1	2.9	2.7	2.5	2.1
Sierra Leone	6.1	5.1	4	3.2	2.9	3
South Africa	4.1	1.5	1.5	1.9	2	2
Tanzania	5.6	4.7	3.7	3.5	3	3.8
Togo	5.7	5.4	5.3	5.1	4.3	4.1
Zambia	3.5	4.3	4.2	3.5	3.5	3.8
Zimbabwe	4.8	5.1	6	6.4	5.8	5.1

Source: Freedom in the House 2021

* Scores range from 1-7 with: 1.0-2.5 = Free; 3.0-5.0 = Partially Free, and 5.5-7.0 = Not Free

*All Free countries qualify as both electoral and liberal democracies. By contrast, some Partly Free countries qualify as electoral, but not liberal democracies.

	1995	2000	2005	2010	2015	2019
Angola	0	0	2	2	2	2
Renin	6	6	6	7	27	27
Botswana	7	8	8	8	8	8
Burkina Faso	0	0	2	2	3	7
Burundi	0		1	7	6	2
Cameroon	0		0	1	1	1
Cape Verde	8	8	10	10	10	10
Central Africa	3	5	3	1	0	7
Comoros	4	3	4	9	9	4
Republic of Congo	5	1	0	Ó	Ó	0 0
Cote D'Ivoire	Ō	1	1	Õ	5	5
Equatorial Guinea	0	0	0	0	0	0
Eritrea	70	0	0	0	0	0
Gabon	0	0	0	2	4	4
Ghana	1	3	7	8	8	8
Guinea	0	1	1	1	4	4
Guinea-Bissau	1	2	4	6	5	7
Kenya	0	4	7	7	9	9
Lesotho	3	6	8	8	9	9
Liberia	0	2	_15	7	7	7
Madagascar	7		7	5	5	6
Malawi	2	6	6	6	6	6
Mali	3	5	6	7	5	6
Mauritania	0	0	0	0	0	0
Mauritius	10	10	10	10	10	10
Mozambique	2	5	5	5	6	6
Namibia	6	6	6	6	6	6
Niger	4	3	6	5	7	6
Senegal	2	3	8	7	7	7
Sierra Leone	0	1	4	7	8	8
South Africa	5	9	9	9	9	9
Tanzania	0	2	2	2	2	4
logo	1	1		Ι	1	1
Zambia	6	3	< 5	6	7	6
Zimbabwe	$\odot 0$	0		2	4	5

Appendix G: Polity 5 Democracy Scores for the Sample of Interest, 1995-2019

Source: Marshall, Monty G., Ted Robert Gurr. 2020. "Polity5: Political Regime Characteristics and Transitions, 1800-2018. Dataset Users' Manual. Center for Systemic Peace.

* Numbers are rounded

* Polity Scores range from -10 to +10 With -10 to -6 corresponding to autocracies, -5 to 5 to anocracies and 6 to 10 corresponding to democracies.

Appendix H: Political Rights Estimates for the Sample of Interest, 1995-2019

	1995	2000	2005	2010	2015	2019
Angola	6	6	6	6	6	6
Benin	2	$\frac{0}{2}$	2	2	2	3
Botswana	$\frac{2}{2}$	$\frac{2}{2}$	$\frac{2}{2}$	$\frac{2}{2}$	$\frac{2}{3}$	3
Burkina Faso	5	5	1	5	5	<u>ј</u>
Burundi	6	7	5	4	6	7
Cameroon	6	7	6	6	6	6
Cape Verde	1	1	1	1	1	1
Central Africa	4	3	6	5	6	7
Comoros	4	5	5	3	3	3
Republic of Congo	4	6	5	6	6	7
Cote D'Ivoire	6	6	6	7	5	4
Equatorial Guinea	A 7	7	7	7	7	7
Eritrea	6	6	7	7	7	7
Gabon	5	5	5	6	6	7
Ghana	5	3	2	1	1	1
Guinea	6	6	6	6	5	5
Guinea-Bissau	5	3	4	4	5	5
Kenya	6	6	4	4	4	4
Lesotho	5	4	2	2	2	3
Liberia	7	5	-5	3	3	3
Madagascar	3	-2	3	5	5	3
Malawi	5	2	4	4	3	3
Mali	3	3	2	2	4	5
Mauritania	7	6	6	5	6	6
Mauritius	1	1	> 1	1	1	1
Mozambique	5	3	3	3	4	4
Namibia	2	2	2	2	2	2
Niger	4	6	4	4	3	4
Senegal	4	4	2	3	2	2
Sierra Leone	7	4	4	3	3	3
South Africa	4	1	1	2	2	2
Tanzania	6	5	4	4	3	4
Togo	6	6	6	5	5	5
Zambia	3	5	4	3	3	4
Zimbabwe	5	5	4	3	3	4

* Source: Freedom in the House 2021

* Numbers are rounded

Appendix I: Civil Liberties Estimates for the Sample of Interest, 1995-2019

	1995	2000	2005	2010	2015	2019
Angola	6	6	5	5	5	6
Benin	3	3	2	2	2	2
Botswana	2	2	2	2	2	2
Burkina Faso	4	4	4	3	3	3
Burundi	6	6	5	5	5	6
Cameroon	5	5	6	6	6	6
Cape Verde	2	2	1	1	1	1
Central Africa	4	4	5	5	6	7
Comoros	3	4	4	4	4	4
Republic of Congo	4	5	4	5	5	5
Cote D'Ivoire	5	5	5	5	5	4
Equatorial Guinea	∧ 7	7	6	7	7	7
Eritrea	75	4	6	6	7	7
Gabon	4	4	4	4	5	5
Ghana	5	3	2	2	2	2
Guinea	5	5	5	5	5	5
Guinea-Bissau	5	5	4	4	5	5
Kenya	6	5	4	3	4	4
Lesotho	4	4	3	3	3	3
Liberia	6	5	_5	4	4	4
Madagascar	4	-4	3	3	4	4
Malawi	5	3	4	4	4	3
Mali	3	3	2	3	4	4
Mauritania	6	5	5	5	5	5
Mauritius	2	2	2	2	2	2
Mozambique	4	4	4	3	3	4
Namibia	3	3	3	2	2	2
Niger	5	5	4	4	4	4
Senegal	4	4	3	3	2	3
Sierra Leone	6	5	4	3	3	3
South Africa	2	2	2	2	2	2
Tanzania	5	4	3	3	3	5
Togo	5	5	5	5	4	4
Zambia	4	4	4	4	4	4
Zimbabwe	5	5	6	6	6	5

Source: Freedom in the House 2021

Numbers are rounded

Scores range from 1 to 7 With 1 representing the highest degree of civil liberties and 7 the lowest.

	1995	2000	2005	2010	2015	2019
Angola	23	22	20	18	16	16
Benin	17	17	15	11	10	10
Botswana	7	6	6	3	3	3
Burkina Faso	16	15	16	17	15	16
Burundi	23	23	21	18	19	21
Cameroon	19	19	18	17	16	16
Cape Verde	7	6	5	5	5	5
Central Africa	14	15	17	19	23	23
Comoros	16	16	15	13	12	11
Republic of Congo	15	16	18	16	13	13
Cote D'Ivoire	16	16	20	16	16	17
Equatorial Guinea	16	15	12	12	12	12
Eritrea	15	16	16	14	14	15
Gabon	12	11	11	11	11	9
Ghana	16	14	12	13	11	11
Guinea	18	19	20	19	18	18
Guinea-Bissau	17	18	18	17	17	17
Kenya	15	15	14	13	10	10
Lesotho	13	12	13	12	9	10
Liberia	24	23	- 22	19	15	13
Madagascar	17	15	14	12	12	12
Malawi	15	14	15	15	15	13
Mali	21	18	17	15	1/	15
Mauritania	18	1/	1/	16	16	16
Mauritius	10	2	2 10	1	12	0
Mozambique	18	18	18	15	13	11 5
Namibia	0	ð 10	ð 10	0) 10) 10
Niger	20	18	18	18	18	18
Sierra Loopo	14	14	12	20	10	10
South Africa	23 12	24 12	25	20	0	15
Soull Allica Tonzonio	15	12	11	0	0	0 10
Tanzania	20	13	14	11	10	10
Zambia	18	17	17	15	13	12
Zimbahwe	17	16	18	17	17	17
	1/	10	10	1/	1/	1/

Appendix J: Social Cohesion Scores for the Sample of Interest, 1995-2019

Source: State Fragility Index and Matrix 2020. Center for Systemic Peace (Marshall & Elzinga, 2020)

*Numbers are rounded

*Scores range from 0 (extreme cohesion) to 25 (no cohesion)

Appendix K: GDP per Capita Estimates for the Sample of Interest, 1995-2019

	1995	2000	2005	2010	2015	2019
Angola	1,269	1,789	2,834	6,343	8,415	8,123
Benin	1,792	1,872	1,916	1,888	1,941	2,147
Botswana	5,880	7,381	8,971	11,738	14,312	15,479
Burkina Faso	1,243	1,282	1,279	1,312	1,408	1,534
Burundi	1,069	789	715	708	725	663
Cameroon	1,706	1,840	2,136	2,346	2,624	2,855
Cape Verde	2,185	3,060	4,202	5,737	6,266	6,606
Central Africa	967	934	888	898	706	606
Comoros	1,160	1,179	1,240	1,416	1,590	1,713
Republic of Congo	3,815	4,003	4,513	5,212	6,090	5,812
Cote D'Ivoire	2,004	2,326	2,300	2,445	2,826	3,556
Equatorial Guinea	2,889	9,438	28,515	42,931	42,607	30,965
Eritrea	739	784	789	991	1,373	1,742
Gabon	8,814	10,927	11,674	13,535	17,462	17,997
Ghana	1,795	2,012	2,267	2,705	3,606	4,083
Guinea	862	9,98	1,146	1,256	1,386	1,529
Guinea-Bissau	1,289	1,269	1,206	1,276	1,380	1,473
Kenya	1,744	1,885	2,031	2,395	2,864	3,265
Lesotho	1,897	1,937	1,995	2,171	2,543	2,740
Liberia	768	737	962	808	864	825
Madagascar	1,146	1,181	1,223	1,377	1,351	1,403
Malawi	853	984	907	1,017	1,109	1,116
Mali	1,126	1,161	1,361	1,464	1,490	1,630
Mauritania	1,639	1,881	-2,113	2,883	3,304	3,432
Mauritius	12,165	13,499	14,549	15,764	17,365	19,526
Mozambique	1,424	1,297	1,162	1,029	1,013	1,123
Namibia	5,450	5,848	6,312	7,558	8,822	9,202
Niger	780	718	740	786	873	942
Senegal	< 1,913	1,922	2,038	2,134	2,201	2,513
Sierra Leone	1,422	894	1,120	1,346	1,736	1,649
South Africa	6,096	7,104	8,547	10,745	12,098	12,165
Tanzania	905	1.060	1,379	1,848	2,381	2,766
Togo	1,150	1,190	1,111	1,171	1,297	1,423
Zambia	1,245	1,337	1,716	2,546	3,386	3,504
Zimbabwe	2,071	2,304	1,804	1,352	1,575	1,576

* Source: Maddison Project Database (MPD) 2020

* Average GDP per capita Sub-Saharan Africa * Real GDP per capita in 2011 prices.

Appendix L: Institutional Quality Scores for the Sample of Interest, 1995-2019

	1995	2000	2005	2010	2015	
		2019				
Angola		-1.22	-1.21	-1.14	-1.09	-1.06
Benin		-0.28	-0.41	-0.55	-0.52	-0.55
Botswana		0.53	0.65	0.52	0.44	0.43
Burkina Faso		-0.74	-0.58	-0.63	-0.60	-0.62
Burundi		-1.54	-1.33	-1.13	-1.15	-1.38
Cameroon		-0.88	-0.79	-0.86	-0.85	-0.79
Cape Verde		0.34	-0.08	0.12	0.12	0.22
Central Africa	<u>.</u>	-1.32	-1.52	-1.44	-1.59	-1.75
Comoros	· · · · ·	-1.47	-1.30	-1.74	-1.61	-1.60
Republic of Congo		-1.18	-1.21	-1.25	-1.13	-1.22
Cote D'Ivoire	1	-0.43	-1.11	-1.20	-0.94	-0.62
Equatorial Guinea		-1.30	-1.36	-1.66	-1.54	-1.37
Eritrea		-1.00	-0.89	-1.32	-1.51	-1.72
Gabon		-0.43	-0.59	-0.78	-0.78	-0.85
Ghana		-0.10	-0.17	0.04	-0.14	-0.17
Guinea	$ \setminus $ $ / / / $	-0.92	-0.88	-1.17	-1.18	-0.95
Guinea-Bissau		-1.22	-1.28	-1.05	-1.37	-1.60
Kenya		-0.51	-0.63	-0.58	-0.43	-0.35
Lesotho		-0.11	-0.15	-0.37	-0.46	-0.83
Liberia		-1.79	-1.46	-1.25	-1.30	-1.33
Madagascar		-0.59	-0.41	-0.69	-1.16	-1.15
Malawi		-0.29	-0.74	-0.56	-0.53	-0.71
Mali		-0.92	-0.62	-0.78	-0.95	-0.99
Mauritania		-0.10	-0.16	-0.92	-0.97	-0.68
Mauritius	7.1.	0.33	0.59	0.77	0.96	0.90
Mozambique	[4.2]	-0.31	-0.48	-0.55	-0.67	-0.86
Namibia	4	0.27	0.11	0.10	0.14	0.14
Niger		-1.08	-0.73	-0.71	-0.67	-0.72
Senegal		-0.04	-0.16	-0.40	-0.44	-0.27
Sierra Leone		-1.39	-1.25	-1.16	-1.22	-1.15
South Africa		0.80	0.66	0.45	0.36	0.32
Tanzania		-0.52	-0.41	-0.49	-0.66	-0.70
Togo		-0.90	-1.42	-1.46	-1.28	-1.04
Zambia		-0.96	-0.85	-0.79	-0.53	-0.63
Zimbabwe		-0.48	-1.06	-1.41	-1.27	-1.19

- * **Source**: Kaufmann & Kraay (2020). World Governance Indicators and author's calculation
- *Scores range from approximately -2.5 (weak) to 2.5 (strong)

Appendix M: Population Growth Rate for the Sample of Interest, 1995-2019

	1995	2000	2005	2010	2015	2019
Angola	3.21	3.27	3.53	3.67	3.43	3.24
Benin	3.29	2.98	2.95	2.80	2.77	2.71
Botswana	2.46	2.03	1.88	1.70	1.52	2.17
Burkina Faso	2.74	2.84	2.95	3.01	2.93	2.84
Burundi	1.48	1.76	3.21	3.25	3.15	3.12
Cameroon	2.75	2.62	2.70	2.74	2.68	2.58
Cape Verde	2.59	1.82	1.39	1.22	1.24	1.12
Central Africa	2.75	2.28	1.96	1.12	0.64	1.67
Comoros	2.79	2.52	2.38	2.41	2.34	2.20
Republic of Congo	2.81	2.88	3.14	3.04	2.48	2.56
Cote D'Ivoire	2.32	2.59	2.11	2.33	2.52	2.54
Equatorial Guinea	3.62	4.11	4.44	4.55	4.04	3.52
Eritrea	-0.64	2.42	3.85	1.60		
Gabon	2.58	2.41	2.67	3.45	3.33	3.48
Ghana	2.69	2.44	2.51	2.48	2.26	2.16
Guinea	2.62	2.28	>2.03	2.25	2.48	2.83
Guinea-Bissau	2.08	2.03	2.36	2.57	2.61	2.45
Kenya	2.98	2.74	2.73	2.72	249	2.27
Lesotho	2.12	0.64	-0.49	0.27	0.75	0.80
Liberia	2.88	5.36	2.59	3.59	2.55	2.42
Madagascar	3.08	3.11	2.95	2.79	2.69	2.65
Malawi	1.00	2.67	2.60	2.87	2.75	2.64
Mali	2.68	2.81	3.23	3.15	2.93	2.99
Mauritania	2.55	2.64	2.84	2.92	2.89	2.74
Mauritius	0.85	0.98	0.59	0.23	0.13	0.03
Mozambique	3.51	2.67	2.88	2.74	2.83	2.90
Namibia	2.23	1.72	1.58	1.80	1.80	1.87
Niger	3.45	3.60	3.72	3.84	3.88	3.79
Senegal	2.67	2.36	2.55	2.74	2.80	2.74
Sierra Leone	-0.13	2.70	3.82	2.25	2.18	2.10
South Africa	2.12	1.40	1.23	1.45	1.52	1.33
Tanzania	2.93	2.46	2.82	2.91	3.00	2.95
Togo	2.53	2.96	2.59	2.69	2.56	2.42
Zambia	2.52	2.67	2.61	2.91	3.06	2.89
Zimbabwe	1.31	0.49	0.47	1.35	1.66	1.41

* Source: United Nations Population Division. World Population Prospects 2019

* Annual population growth rate for year t is the exponential rate of growth of midyear population from year t-1 to t, expressed as a percentage.

Appendix N: Political Stability Estimates for the Sample of Interest, 1995-2019

	1995	2000	2005	2010	2015	2019
Angola		-2.13	-1.13	-0.43	-0.39	-0.32
Benin	•••	0.86	0.55	0.39	0.2	-0.11
Botswana		1.01	0.99	1.01	1.06	1
Burkina Faso		-0.11	-0.09	0.1	-0.65	-1.01
Burundi		-2.14	-2.14	-1.47	-1.51	-1.79
Cameroon		-0.76	-0.41	-0.46	-0.76	-1.27
Cape Verde		1.12	0.86	0.86	0.70	0.84
Central Africa		-1.15	-1.53	-1.89	-2.07	-2.03
Comoros		0.36	-0.21	-0.77	-0.33	-0.10
Republic of Congo		-1.24	-1.27	-0.56	-0.44	-0.57
Cote D'Ivoire		-0.47	-2.02	-1.68	-1.11	-0.96
Equatorial Guinea		-0.08	-0.22	0.24	-0.01	-0.14
Eritrea		-0.89	-0.60	-0.84	-0.78	-0.67
Gabon		0.36	0.36	0.24	0.23	-0.15
Ghana		-0.24	0.02	-0.006	0.04	0.008
Guinea		-1.21	-1.1	-2.04	-1.05	-0.69
Guinea-Bissau		-1.25	-0.54	-0.60	-0.77	-0.54
Kenya	\frown \	-0.87	-1.19	-1.28	-1.25	-1.19
Lesotho	··· /-	0.07	0.10	0.01	0.07	-0.23
Liberia		-2.04	-1.77	-1.07	-0.56	-0.32
Madagascar		0.19	0.15	-0.38	-0.58	-0.35
Malawi		-0.28	0.06	0.04	-0.03	-0.26
Mali		0.34	0.32	0.11	-1.57	-1.94
Mauritania	···· (0.35	0.01	-0.52	-0.90	-0.63
Mauritius		0.94	1.03	0.78	0.90	0.92
Mozambique	····	-0.02	0.14	0.45	-0.07	-0.89
Namibia		0.36	0.48	0.98	0.83	0.64
Niger	6	-0.05	-0.27	-0.73	-1.12	-1.28
Senegal		-0.72	-0.17	-0.25	-0.15	-0.07
Sierra Leone		-1.91	-0.69	-0.22	-0.16	-0.09
South Africa		-0.38	-0.21	0.03	-0.08	-0.21
Tanzania		-0.57	-0.58	-0.17	-0.23	-0.48
Togo		-0.42	-0.47	-0.27	-0.26	-0.68
Zambia		0.09	0.06	0.45	0.38	0.07
Zimbabwe		-0.84	-1.27	-1.10	-0.74	-0.74

* Source: Kaufmann & Kraay (2020). World Governance Indicators and author's calculation

*Scores range from approximately -2.5 (weak) to 2.5 (strong)

* Scores range from 1 to 7 With 1 representing the highest degree of political rights and 7 the lowest.

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