Essays on Institutions and Economic Development in Kenya

University of Cape Town

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Declaration

I, Emmanuel M. Letete declare that this thesis, submitted in partial fulfillment of the requirement for the award of Doctor of Philosophy in Economics in the School of Economics, University of Cape Town, is wholly my own original work. No portion of this work has been submitted in support of an application for another degree or qualification of this type or any other in another university or institute of learning. Where other people's work is used in support of this work, due reference is made.

Abstract

This thesis focuses mainly on three related issues of the new institutional economics and political economy research: (i) the evolution of formal economic and political institutions over time (ii) the causality between political institutions and economic institutions, and that between institutions and economic development; (iii) and the role of institutions in economic development through the channel of foreign direct investment and in the control of rent seeking and corruption in Kenya. These issues are discussed in four distinct essays, each essay constituting an independent and self-contained chapter. The study adopts the conceptual framework on institutions proposed by Douglass North.

The central theme of the thesis across all chapters is the demonstration of how political players holding de-facto political power operating under weak political rights and civil liberties use legal operators to benefit themselves and their close associates. For instance, starting with British rule—protectorate period (1885-1920) and colonial period (1920-1963)—an extensive legal apparatus designed by those holding de-facto political power expropriated much of the land and redistributed it to themselves at the expense of the indigenous populations whose political rights and civil liberties were crossly undermined. However, even after independence, several political players in the newly independent Kenya made little effort to fundamentally change the colonial laws that governed land rights and could not as well promote strong political rights and civil liberties. The thesis argues that despite pressures from the populace, political leaders and their interest groups holding de-facto political power entrench themselves in the system under weakly institutionalized environment, and oppose the constitutional reforms by all means including force, since

such reforms go against their interests. The delay in such reforms often leads to the breakdown of governance. Such breakdown inevitably leads to conflict and social crisis such as the Kenya post-election crisis of 2007. The chapters in the thesis are organized in such a way that they start by tracing the evolution of rights promoted by people holding de-facto political power, then later the remaining chapters take on the assessment and implications of how such rights promoted under weakly institutionalized environment affect economic outcomes. The specific issues addressed in these chapters are outlined in the paragraphs that follow.

The first essay explores the evolution of institutions in Kenya over a 130-year period (1880-2010). It addresses three related questions: what kind of economic institutions and political institutions did the colonial settlers set up in Kenya? Did they set up inclusive institutions or extractive institutions, in the terminology of Acemoglu and Robinson (2012)? How did these institutions evolve over time? Did these institutions change after independence? This essay provides the narrative evidence to show the dynamic interactions between political and economic institutions, and how the equilibrium economic institutions are shaped by political forces over time. The essay contributes to the institution-development literature by filling in the research gap identified by North (1993, page 1) when he stated that "although Ronald Coase made the fundamental contribution of pointing out that when it is costly to transact, institutions matter, neither he nor most of his followers have explored how property rights and other institutions come about". This essay further contributes to the literature on the measurement of institutions in general by providing a novel dataset on the institutions in Kenya. By design, this new dataset circumvents the major problems identified in conventional institutional indices. This essay also contributes to the political economy literature which addresses questions centered on the creation of institutions and their evolution.

The second essay provides empirical evidence to address three basic questions of the institutions-development literature: (a) Are institutions persistent? And why are they persistent? (b) Do political institutions cause economic institutions? (c) What is the direction of causality between institutions and economic development in Kenya? This essay is motivated by the paucity of em-

pirical studies that test the widely accepted assumption that institutions are persistent. Second, it is motivated by the claim by Acemoglu and Robinson (2012) that political institutions drive economic institutions, which has not been empirically tested. Lastly, it is motivated by the continuing debates on the direction of causality between institutions and economic development. The essay makes three distinct contributions to the institutions-development literature. First, it provides evidence for the assumption that institutions are persistent and offers explanations for this persistence. Second, it provides a conclusive test of the hypothesis advanced by Acemoglu and Robinson (2012) that political institutions drive economic institutions. Third, it contributes to the institutions-development literature by presenting evidence on the causality between institutions and economic development for a country case study using Time Series methods as suggested by Chang (2011) and Chang (2006).

The third essay assesses the role of property rights institutions on foreign direct investment in Kenya. This assessment is a response to the emerging theoretical claim by the New Institutional Economics (NIE) literature that developing countries are unable to attract and retain foreign capital due to weaknesses in property rights institutions. Despite the general acceptance of this claim, empirical evidence in its support is lacking for the developing countries especially at a country level. This is in part due to the unavailability of property rights measures that date far back enough to be used to undertake the Time Series analysis to validate such a relationship. This essay contributes to the economic literature in three ways. First, it provides evidence in support of this theoretical claim. This analysis meets Chang (2011) and Rodrik (2008)'s requirement that economic development studies must also apply Time Series case studies to understand the role of institutions on economic development outcomes. Second, it contributes to this literature by constructing a theoretical model that presents the channel that links the quality of property rights institutions and decisions to invest in a developing country by foreign firms. Third, it contributes to the growing development literature that looks at the channels through which institutions influence the process of economic development in developing countries. As pointed out by Alfaro et al. (2007) there is little systematic evidence on the specific mechanisms of how institutions affect economic development. This work identifies FDI as one of those missing links.

The last essay explores the relationship between political institutions and illicit financial flows from Kenya. This exercise is motivated by the puzzle of the continued net outflows of financial resources experienced by a number of African countries despite their developmental challenges of lack of resources to finance their developmental goals. This essay addresses one basic question: What is the relationship between political institutions and illicit financial flows and rent extraction from Kenya? The essay assesses empirically the role of political institutions in illicit financial flows. This empirical assessment reveals that increased executive powers in Kenya is positively associated with illicit financial flows. Thus weaknesses in political institutions matter for illicit financial flows from Kenya. The implication from this evidence is clear: Reducing powers of the executive could reduce illicit capital flows especially those associated with corruption in government.

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Dedication

I dedicate this thesis to my daughter-Mosa Letete and my late Father-Mr. Francis Majara Letete, who was always a source of inspiration.

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Conference Papers

Portions of the work presented in this thesis have been presented in a number of international conferences and these are highlighted below:

- Letete E.M. "Rent Extraction. Political Institutions and Politics of Fear: Theory and Evidence from Kenya", *Economic Research South Africa (ERSA) Political Economy Workshop*, held in Pretoria South Africa, 29-30, October 2013
- Letete E.M., and Sarr M., " The Quality of Institutions and Foreign Direct Investment in Kenya", *Conference papers of the Pacific Rim Economies: Institutions, Transition and Development*, held at Seoul University, South Korea, April $24^{th} - 26^{th}$, 2013
- Letete E.M., and Sarr M., "Measurement of Institutions and Political Instability: Is there evidence of Persistence and Interdependence?" Presented at the *New Institutional Economics International* 17th *Annual Conference of the International Society for the New Institutional Economics*, held in Florence Italy, June 20-23, 2013
- Letete E.M., and Sarr M., " Institutions and Measurement" , *Economic Research Southern Africa History Conference*, Johannesburg South Africa, 2011
- Letete E.M., and Sarr M., " Institutions and Measurement" , *African Economic Research Consortium Bi-annual Conference Proceedings of the Workshop on* the industrial transformation in Africa, held in Nairobi Kenya, 2011.

Accompanying CD-ROM

This thesis is provided on a supplementary CD-ROM attached to the back cover of this thesis. It contains all chapters of the thesis and the corresponding appendices to these chapters

Prologue

"Nations fail today because their extractive economic institutions do not create the incentives needed for people to save, invest, and innovate. Extractive political institutions support these economic institutions by cementing the power of those who benefit from the extraction. Extractive economic and political institutions, though their details vary under different circumstances, are always at the root of failure. ."

– Daron Acemoglu and James A. Robinson (2012: *page 372*)...."

Chapter 1

Introduction

"Therefore the factors we have listed (innovation, economies of scale, education,capital accumulation, etc.) are not sources of growth; they are growth. Factor accumulation and innovation are only proximate causes of growth and development. The fundamental cause of growth and economic development is institutions". The key to growth was and is an efficient economic system. Efficient in the sense that the system of property rights gives individuals incentives to innovate and produce, and, conversely inhibits those activities-rent-seeking, theft, arbitrary confiscation and/or excessive taxation, that reduce individual incentives."

– North D.C and Thomas R.P (1973: page 2).

1.1 Background and Thesis Overview

ONE of the most pressing issues in comparative economic development literature is explaining the causes of economic development (or the lack thereof) of countries across the world. This is particularly so for countries in Sub-Saharan Africa: First, a number of these countries have had poor development performance on average over the past five decades of post-colonial rule[1], and they continue to face several major developmental challenges, which are not

[1]For instance, Fosu (2009) shows that over the period 1960-2005, real per capita GDP growth averaged 1 percent per year while during the same period, a comparable rate of growth was 2.8 percent for the OECD countries and 2.2

limited to, extreme poverty levels, low levels of social and private investment (both foreign and domestic investment), lack of resources to finance their development programmes, corruption and recurring civil wars and conflicts (Aryeetey et al., 2012; African Development Bank Group (AfDB) and UNECA, 2012; Blankenburg and Khan, 2012; Ndikumana and Boyce, 2011; Ndikumane and Boyce, 2011)[2]. Second, despite their economic hardships and the development finance gap, these countries continue to experience net outflows of financial resources to the developed world[3]. These financial resource outflows that are estimated close to US $1.4 trillion over a 30-year (1980-2009) period have meant further deepening of underdevelopment as these countries continue to lose resources that could be used to finance their development goals (African Development Bank and Global Financial Integrity, 2013; Ndikumane and Boyce, 2011). This capital outflow puzzle could indicate that these countries are experiencing a "savings glut" (in Ben Bernanke's terminology).

Given that these countries were once colonized by the European imperial powers, the issue is whether these developmental challenges are a result of institutions that were created during the colonial period, but which have persisted to the present-day, and continue to affect their patterns of economic development. In other words, is the state of underdevelopment the aftermath of colonization which has had a persistent effect through its impact on the patterns of institutional development? This issue remains central in the literature on institutions and economic development (New Institutional Economics (NIE) literature)[4]. This literature has advanced the institutional hypothesis that contends that the process of economic development (or the lack thereof) is primarily a function of the quality of economic and political institutions-the institutions whose roots are traced back to colonial rule[5](Acemoglu and Robinson, 2012; North and Thomas, 1973b).

percent for the Latin American countries. This growth performance has not only been episodic overtime but also varied substantially across countries.

[2] see also Rodrik (2005); Easterly and Levine (2001); Sender (1999); Scully (1988)

[3]These financial flows are claimed to be illicit and they are a result of political corruption, kickbacks, tax evasion, criminal activities, transactions of certain contraband goods, and other illicit business activities across borders. (Reuter, 2012; Ndikumane and Boyce, 2011; Heggstad and Fjeldstad, 2010; Hollingshead, 2008).

[4]This literature follows the classical ideas of North (1993, 1990, 1987a); North and Thomas (1973b).

[5]For instance, in a recent series of landmark papers, La Porta et al. (2000, 1999, 1998) have argued that the historical fact of being colonized by Britain for example, rather than any of the other colonial powers, has a strong effect on the legal system of the former colonies and, through that, on economic development.

Institutions, in this context, are understood to be a composite of norms and rules that govern human interactions and the enforcement thereof (North, 1990, 1993). On one hand these institutions are said to include formal rules such as the laws that protect private property rights, the enforcement of the rule of law, and the protection and respect of peoples' political and civil liberties. On the other hand, they are claimed to include informal rules that comprise habits, beliefs, social cleavages, traditions and norms (North, 1990, 1993). It is argued that these institutions provide the overall incentive structure that supports markets, that channel individual economic efforts into economic activities that bring the private rate of return close to the social rate of return , and that enable trade and exchange to take place to increase the economy's productive capacity (Acemoglu and Robinson, 2012; Banerjee and LYER, 2005; North and Thomas, 1973b). In one of his landmark contributions to this literature, North (2006, p.6) further claims that development (economic change) depends largely on "adaptive efficiency," of the country's institutional matrix. The concept of adaptive efficiency, he explains, relates to society's capacity and capability to create institutions that are productive, stable, fair, and broadly accepted—and, yet sufficiently flexible enough to be changed or replaced in response to exogenous shocks or to growing tensions inherent in society's development. Therefore, according to him, different societies create the institutional infrastructure that greatly determines their economic development trajectories (North, 1993, 1990; Acemoglu et al., 2001, 2003).

Relying on North's conception of institutions, this literature suggests that developing countries, in particular those in Africa, failed to develop because they did not create the development-promoting institutional structures of the type created by Western countries or, where they were created, they were either weak, or poorly devised and implemented. This literature further argues that the State in each of these countries was either too weak to act as a guarantor of rights and institutions or much too predatory in its own demands, posing a threat to them (Bardhan, 2001)[6]. In contrast, Western societies developed because they established the incentive creating institutions that constrained the behaviour of participants in markets (i.e economic markets and political

[6] The nature of the state and the question relating to the circumstances under which the state would protect private property rights are the classical issues that framed North's contributions to the New Institutional Economics literature.

markets); that reduced uncertainty in social interactions through the protection of property rights; that limited agency costs and rent seeking; and in general, that prevented excessive transaction costs in markets. The transaction costs are understood in this context to include the costs of making exchange, costs of contract enforcement, and the information costs (Coase, 1992, 1988). All these costs are said to affect not only contractual arrangements but also what is produced and exchanged, and the size and activities of the entire economy (Coase, 1992). At the same time Western countries had strong states that had credible commitment to enforcement of the rule of law and were less predatory. In consequence, these countries realized productivity gains from larger scale and improved technology that stimulated their economic development. The empirical evidence in support of the institutions hypothesis that institutions matter for economic development. The hypothesis emerged in the early classical papers starting with those by Barro (1996, 1991),Keefer and Knack (1995), Hall and Jones (1999) and Acemoglu et al. (2002, 2001). Later studies by Rodrik et al. (2002); Kaufmann and Kraay (2002) and Easterly and Levine (2003, 2001), also produced evidence in support of this hypothesis.

In contrast to the New Institutional Economics strand of literature, there are other competing views on the main causes of lack of economic development among African countries. These include the "government policy failure hypothesis" and "the geography hypothesis". I do not discuss these competing hypotheses in detail since they do not form the core part of this thesis, rather I present a summary discussions of them and their weaknesses.

The Policy Failure Hypothesis

This hypothesis was an early explanation for African underdevelopment in general. According to the proponents of this hypothesis, the problem of economic development of the African states is a result of government policy failure or bad economic policy making. This hypothesis argues that government intervention in markets and policy induced distortions in these countries from the 1960s to the 1970s after they attained independence from the colonial rule, were the main structural constraints to their economic development. At the same time, the quantitative restrictions imposed under import substitutions strategies were seen as the main driving force behind rent-

seeking and corruption in these countries. These prior beliefs gave rise to the reform agenda of the 1990s that exemplified a fundamental paradigm shift away from the structural perspective that advocated the import substitution and government intervention strategies on the basis that markets would not function in developing countries in the same way as in advanced economies due to a variety of structural constraints: Limited and fragmented markets, insufficient information, poverty traps and weak infrastructure (Szirmai, 2005).

The 1990s reform agenda that was coined within the Washington consensus framework attempted to solve the problem of underdevelopment of African countries through three basic strategies: Macroeconomic discipline, a market based economy, and the outward-orientation policies. In Rodrik (2006, p.973)'s words, this policy strategy involved three basic ideas- "stabilize, privatize and liberalize". These market oriented reforms further gained impetus with the collapse of the Sovient Union-a situation that strengthened the claim that government involvement in market activities was distortious. These strategies were grounded in the Neo-classical assumptions of zero transactions costs ("frictionless world"), perfect information and an institutions-free world (North, 1990). However, after a decade of implementation of this reform agenda, the developmental challenges of these countries had not been solved. This was evidenced by the continued disappointing growth performance which remained well below that achieved under the earlier import substitution policies.

Anderson (2009); Ndulu et al. (2008); Bates (2005) note that the said market oriented policies of the 1990s resulted in the unintended consequences of leaving the majority of the people worse of and benefiting a few elite groups in societies. Bates (2005) further argues that in a number of African countries distorting macroeconomic policies (monetary policies, exchange rate policies and fiscal policies) were adopted for short-term political goals including redistribution, employment, and patronage rather than long-term economic development[7]. They argue that such policies could not be abandoned timely due to the collective action problem hence people in these economies failed to mobilize political oppositions to their governments. The end product of this

[7] See also Cox and McCubbins (1986), Dixit and Londregan (1996)

was the long-run underdevelopment. Bates's claims support the notion that African underdevelopment is a result of the inability of the African governments to make credible commitments and refrain from opportunistic behaviour[8].

But government policy itself is framed by the types of players and their interest in the political game. Therefore policy mistakes used to explain underdevelopment are not really mistakes because people get policies wrong by design in order to benefit certain groups or individuals (Acemoglu and Robinson, 2012). It is for this reason that the quality of political, legal, and economic institutions has been found to be central in influencing such outcomes over time. Consequently, the basic reforms that improve institutions are regarded as one of the surest routes for transforming a country in the long run from poverty to prosperity. This view, which underlies a good deal of recent empirical research on economic growth and development, is also the central theme pursued by many international lending institutions such as the World Bank and the IMF.

The New Geography Hypothesis

The new geography hypothesis views natural resources endowment, the effects of climate, tropical diseases burden, transportation costs and the diffusion of technologies across spatial barriers within and between nations as the main determinants of development (Diamond, 1997; Gallup et al., 1998). Geography is claimed to exert a strong influence on agricultural productivity and the quality of human resources. While Sachs (2001) does not give any recognition to policy variables or institutional factors as important for economic development, Gallup et al. (1998) claim that some effects of geography are mediated by policies and institutions: "Good policy and good geography may have a tendency to go together.... the result is that natural differences in growth potential tend to be amplified by the choice of economic policies." Yet their central claim remains that geography matters, even when policies and institutions are controlled for. However, this hypothesis has been challenged in the context of Africa given the abundance of natural resources that the continent possesses, the reduction in transportation costs due to changes in technology and the growth of some countries which are also landlocked. If the geography hypothesis was cor-

[8] see Coate and Morris (1999)who claim that once such distortions have been implemented, they cannot be reversed

rect, African economies would have grown faster (Noman Akbar and Stiglitz E.Joseph, 2012). This hypothesis would also not explain the puzzle of net outflows of capital in the presence of the development financing gap.

This thesis is based on the New Institutional Economics literature, and as such it will examine the research gaps and the unexplored research questions from this literature. These will form the basis of inquiry for this thesis.

Research Gaps and Criticisms of Literature

The contributions and insights from the New Institutional Economics literature has contributed insights on economic development. However there are limitations to this literature and some research gaps that still warrant attention. The basic limitation of this literature has been its exclusive use of cross country econometric analyses with less attention given to country case studies to prove the importance of institutions for economic development. For instance, Rodrik (2008) notes that the evidence provided by such analysis is uninformative because it ignores the influence of institutions (economic and political institutions) at a country specific level despite the recognition that developing countries are different from advanced economies. He notes further that because countries are heterogeneous, the kind of institutions that work in one country might not necessarily work in another. Developing countries might need "appropriate" institutions. By "appropriate institutions" he refers to those institutions that are country and context specific. In addition, Rodrik (2007:15) argues that while competitiveness-enhancing institutions have the same functions across economies-namely, the protection of private property-their form is context specific, and history dependent.

Chang (2011, p.483) endorses Rodrik's argument and notes further that "given that the relationship between institutions and development is almost certain to differ across countries, 'time-series' evidence may offer better further that such evidence should also not be confined exclusively to econometric analysis, which cannot capture complexities that characterize the domain of institutions, but should include historical narratives and comparative historical studies. In the light

of the foregoing arguments, an exploration of the influence of institutions on economic outcomes at the country level is warranted.

Although the NEI literature has suggested the need to understand the formation and evolution of institutions across time and space to understand the process of economic development (North, 1993, 1990; North et al., 1971), the studies that attempt to do so are limited[9]. This omission was noted earlier by North in his seminal works as is reflected in the following extract: “although Ronald Coase made the fundamental contribution of pointing out that when it is costly to transact, institutions matter, neither he nor most of his followers have explored how property rights and other institutions come about”North (1993, page 1). Bardhan (2001) corroborates North (1993) and notes that “...it is clear that the literature has barely scratched the surface of an as yet largely unexplored story in poor countries. Particularly lacking are the theoretically informed, inductive, historical analyses of institutional evolution and change (or atrophy) in these countries of the kind Greif has so incisively carried out for late medieval Europe”[10]. North has further emphasized the need to first understand the stability characteristic of institutions, and the interaction between political institutions and economic institutions in order to understand institutional change.

Despite this oversight, the literature has at least advanced the notion that the current institutions in the former colonies were shaped by their colonial history. This notion has been popularized by Acemoglu et al. (2001) who develop an elaborate argument based on the colonial legacy of former colonies. Specifically these authors postulate that Europeans colonizers established institutions that were not conducive for investment and development (that were extractive, in Acemoglu and Robinson (2012)’s terminology) in places where they could not settle because they faced high mortality rates. They contend that such extractive institutions did not foster the process of economic development and have persisted to the present-day, and continue to stifle the process of economic development. In places where they settled because they faced lower settler mortality rates, they created durable institutions (inclusive institutions, in their terminology) that were

[9]Few studies such as those by North and Thomas (1973b) and Greif (1994) discussed the evolution of institutions in Western World but they also do not look into formal institutions

[10] Chang (2011) also notes this weakness in his claim that the dominant discourse on institutions and development suffers from lack of understanding on how institutions evolve and change.

conducive for private investment and thus promoted economic development.

Criticism of this literature lies in its omission of the channels through which institutions affect the process of economic development, and in identifying a set of institutions important for economic development at country level. In one of their often cited papers, Acemoglu and Johnson (2003) argue that while there is considerable evidence that institutions are important determinants of economic and financial outcomes, there has been relatively little work investigating which types of institutions matter more for economic outcomes. This thesis offers a step in that direction.

In addition, the evidence presented by the institutions-development literature has often been criticised for using conventional institutional indicators (the Heritage Foundation index of property rights, the International Country Risk Guide (ICRG) measures of property rights and investors protection, and Polity IV measures of political institutions) that are claimed to be suspect. For instance, Glaeser et al. (2004) criticize these measures on the grounds that they measure outcomes and not permanent characteristics of institutions as postulated by North (1990). These authors further claim that these indicators rise with per capita income and are highly volatile and thus are poor measures of permanent or even durable features of institutions. This thesis contributes to the institutions and development literature by providing a new set of institutional indicators that circumvent these weaknesses.

Research Questions and the Contribution of the Thesis to the Literature

Despite theoretical and empirical contributions and insights from this literature, a number of important but challenging research questions remain to be explored in this broad research agenda. These basic questions are: How do institutions evolve across time and space? To what extent have the institutions established during the colonial period persisted to the present-day? Why have they persisted? Do political institutions determine economic institutions? How and to what extent have these institutions impacted on the process of economic development of the former colonies at individual country level? Is the continued net outflow of financial resources a result of weak political institutions that were established during the colonial period but persisted to

the present-day? Are they rather a reflection of broader post independence institutional failures? To what extent do such institutions (i.e. the property rights institutions) continue to affect the process of investment (either domestic or foreign investment) of the former colonies in Africa? Understanding these issues remains crucial for paving the new developmental path for African states and continue to warrant attention in both academic and policy discourse.

As part of this discourse, this thesis explores some of the foregoing research questions of the broader new institutional economics and political economy research agenda. This research seeks to avoid the caveats of the literature highlighted above. The thesis focuses mainly on three related issues: (i) the evolution of economic institutions and political institutions across time and space, (ii) the causality between institutions and economic development outcomes, and between political institutions and economic institutions, (iii) the role of institutions in economic development through the channel of foreign direct investment and the control of rent seeking and corruption. This research makes use of the conceptual framework on institutions proposed by Douglass North. This framework relaxes the Neo-classical assumptions of perfect information, zero transaction costs and perfect rationality. This framework will be explained in the sub-section that follows. Based on this framework, emphasis will be placed on the role of legal institutions-both property rights institutions and political institutions on economic development outcomes. These issues are discussed in four distinct essays as outlined below, where each essay constitutes an independent self-contained chapter.

This thesis is focused mainly on Kenya as a case study and the motivation for choosing Kenya for this research work will be explained .

Essay One: Evolution and Measurement of Formal Institutions in Kenya

This essay, considers evolution of formal institutions, both economic and political institutions, over a 130-year period (1880-2010) using Kenya as a case study (this is presented and discussed in chapter three). The study is concerned with how political institutions and economic institutions arise as a result of self-interest of those who hold political power. Three central questions that

frame this exploration are: What kind of economic institutions and political institutions did the colonial settlers create in the colonies where they settled? That is, did they set up inclusive institutions or extractive institutions, in the terminology of Acemoglu and Robinson (2012)? How did these institutions evolve over time? Did these institutions change after independence? If they did, why did they change? or if they did not change, why did they not change? The focus is on formal institutions because doing so provides a way through which the dynamic interactions between political and economic institutions can be understood. It can also reveal how the equilibrium economic institutions are shaped by political forces over time. This approach meets North (1993, page 13)'s suggestion that since economic institutions (property rights) are specified and enforced by polities, an in-depth understanding of the way polities evolve is important to understand the way property rights evolve.

A lengthy 130-year time span has been chosen for the study. This follows Kaufmann et al. (2003) who argue that the likelihood of observing significant changes over time in institutional variables increases substantially with the length of time under consideration. Such a lengthy time span is also chosen in order to unfold some nuanced historical information that might shed light on Kenya's economic development problem. The motivation for this chapter is the general lack of research on the evolution of institutions across time and space, and how they change, particularly in developing countries. The exploration of the evolution of institutions across time and space fills the existing gap in the institution-development literature as identified by North (1990). This contribution further advances the political economy literature where the main thematic question centers on the creation and evolution of institutions(see Grindle, 2001). The study also contributes to the literature on the measurement of institutions by providing an alternative lengthy time series dataset on the evolution of institutions at least for one representative African country. This dataset can be used to understand the dynamics of economic development in this economy. The issue of the measurement of institutions, particularly property rights institutions and political institutions that date far back for developing countries, has been one of the outstanding issues in this literature. By design this new dataset to a large extent circumvents the major problems identified with the conventional indices. Research using this dataset can inform debates relating

to the measurement of institutions in the institution-development discourse in general.

Essay Two: Persistence of Institutions, and Institutions-Development Causality in Kenya

This essay uses the dataset discussed in the previous chapter to answer four key questions of the institutions-development literature: (a) Are institutions really persistent[11]? If yes, why are they persistent?; (b) Do political institutions cause economic institutions?; (c) What is the direction of causality between institutions and economic development in this representative African economy? This chapter is motivated first by the lack of empirical studies that test the widely used assumption that institutions are persistent. This assumption has often been applied in both theoretical and empirical work on institutions-development discourse as a base for the instrumental strategy used to prove the primacy of institutions over other causes of development. However, this assumption has rarely been empirically tested due to the dearth of Time Series data on African institutions going back to the colonial era[12]. This assumption was popularized by Acemoglu et al. (2001) who develop an elaborate argument based on the colonial legacy of former colonies. Second, this essay is motivated by the latest compelling claim from Acemoglu and Robinson (2012) that political institutions drive economic institutions which in turn drive the process of economic development, yet also has not been empirically tested. Last, it is motivated by the continuing debates on the direction of causality between institutions and economic development. For instance, while a number of theoretical and empirical studies claim that it is institutions that drive the process of economic development.Lipset (1959)[13] and his followers argue that development leads to better institutions (Chang, 2011, 2006)[14]. According to these authors, a minimum threshold level

[11]Few studies (see Melisa Dell, 2010 for the case of Peru) have provided evidence in support of this assumption hence I provide further evidence on the test of persistence using time series data

[12]Studies that rely on this assumption in particular, contend that, in colonies where high mortality rates discouraged settlement by European colonialists, extractive institutions that were not conducive to investment were designed. The persistence of such institutions has hindered current economic development. At the other end of the spectrum, in places with low mortality rates, the colonialists settled and developed institutions–akin to those in Western Europe–that created the conditions for enhancing private investment and economic development.

[13]Lipset (1959) advanced this hypothesis known as the Lipset hypothesis.

[14]However Chang (2011) notes that the paper by Acemoglu et al. (2001) is a partial exception in the sense that it recognizes the two-way nature of the relationship at a theoretical level. However it goes on to conclude through the use of instrumental variables that the causality runs from institutions to development.

of economic development and human capital is the basic requirement for sustaining democratic institutions and economic institutions. These authors further posit that such a minimum threshold level could even be reached through policies pursued by dictators (Glaeser et al., 2004; Djankov et al., 2003).

This chapter therefore makes three distinct contributions to the institutions-development literature. First, it provides evidence for the assumption that institutions are persistent and offers explanations for this persistence. Second, it provides evidence for the hypothesis advanced by Acemoglu and Robinson (2012) that political institutions drive economic institutions. These two hypotheses have not been tested in empirical literature on institutions-development discourse. Third, this study contributes to the institutions-development literature on the direction of causality between institutions and economic development by presenting evidence on this causality analysis for a country study. This case study uses Time Series methods as suggested by Chang (2011, 2006). It is hoped that this evidence will add to the already existing evidence on this highly controversial issue.

Essay Three: Foreign Direct Investment and Institutions in Kenya: Are Institutions A Binding Constraint?

This essay assesses the role of property rights institutions on foreign direct investment in Kenya. This assessment is a response to the emerging theoretical claim by the New Institutional Economics (NIE) Literature that developing countries are not able to attract and retain foreign capital due to weaknesses in their property rights institutions. This literature stands in complete contrast to the earlier views of the proponents of the neoclassical paradigm; They asserted that the failure of these countries to attract and retain foreign capital was caused by trade protection measures, import substitution strategies and repressive financial policies adopted after the colonial rule(see Salvatore, 1991; Brainard, 1997). This earlier literature had suggested that the solution to this problem was the liberalization of trade regimes, the deregulation of goods and financial markets, the abandonment of trade protection measures, and the pursuance of the outward/export orientation strategies. Yet a number of the African countries failed to attract FDI even after imple-

menting these Neo-liberal policy prescriptions in line with the Washington Consensus(Fine et al., 2004). These strategies thus failed to change foreign investors' incentives to invest in developing countries, and led to the new theoretical claims by the NIE theorists.

Despite the general acceptance of this emerging theoretical claim, empirical evidence in its support is lacking for developing countries at a country level. This is in part due to unavailability of property rights measures that date far back and could be used to undertake a time series analysis of such a relationship at country level. This research discussed in this chapter fills this research gap. However, it asserts that although property rights institutions are important for FDI in Kenya as reflected by their positive effect on FDI flows, they might not be the only binding constraint. This is suggested because Kenya has a relatively good property rights institutions as proxied by Freehold Property Right Index yet has only realized meager FDI flows. This can be referred to as the "property rights-FDI puzzle" in a developing country. This puzzle could be explained perhaps by a lack of credible enforcement of such institutions. That is, even if de-jure institutions are sound, they may not be enforced and this will continue to stifle investment.

The contributions to the economic literature in this essay are threefold. First, the study provides evidence in support of the theoretical claim that property rights institutions are important for investment in developing countries using Time Series analysis at a country level. This analysis surely meets the requirement of Chang (2011); Rodrik (2008)that economic development researchers must also apply Time Series case studies to understand the influence of institutions on economic development outcomes. Second, this research contributes to the literature by constructing a theoretical model that demonstrates the link between the quality of property rights institutions and foreign direct investment decisions related to a Developing country. Third, the work contributes to the growing literature that looks at the channels through which institutions influence the process of economic development in developing countries. As pointed out by Alfaro et al. (2007) there is little systematic evidence on the specific mechanisms of how institutions affect economic development. This work identifies FDI as one of those channels. It also shows that the quality of property rights institutions shapes international capital in developing countries

such as Kenya. Thus foreign investment might be one of the missing links through which institutions affect long-run development in these countries. This study is in line with the recent work on economic development that emphasizes the role of institutions in achieving higher income levels.

Essay Four: Illicit Financial Flows and Rent Extraction in Kenya: To What Extent do Political Institutions Matter?

This last essay examines the relationship between political institutions, proxied by the increasing powers of the executive, and illicit financial flows from Kenya. This exercise is motivated by the puzzle of continued net outflows of financial resources experienced by a number of African countries despite their lack of resources to finance their developmental goals. Two general questions are of importance in this chapter: Does increasing the powers of the executive increase illicit financial flows and rent extraction from Kenya? Why do Kenyans continue to vote for leaders that they suspect are corrupt? To this end, the research assesses empirically the role of political institutions in illicit financial flows. Findings from this study are that increased executive powers is positively associated with illicit financial flows. Thus weaknesses in political institutions matter for illicit financial flows (rent extraction) from Kenya. This research could be taken further by others to see if these findings are applicable to other African countries.

This essay fills the existing research gap in the literature on political accountability and rent seeking, illicit capital outflows from developing countries using Kenya as a case study. To the best of my knowledge, there has not been any study that attempted to demonstrate the influence of increasing powers of the executive on illicit capital flows from Africa or elsewhere. All previous studies such as that by Ng'eno (2000) do not consider political institutions as the explanatory variable in their regressions. The only study that has attempted to study the factors that influence illicit financial outflows from Kenya is that by Ng'eno (2000). However, that study used the Neo-classical framework and equated the illicit capital flows to capital flight. This was a fundamental weakness of the study. It also largely ignored the political economy and institutional explanations of such flows. It further ignored the changing political context within which illicit financial flows have occurred in Kenya.

This paper linked to earlier research that attempts to understand capital flight from and corruption in Africa. These include those by Yalta and Yalta (2012); Ndikumana and Boyce (2011); Ali and Walters (2011); Fofack and Ndikumana (2010); Ndikumana and Boyce (2008); Cerra et al. (2008); Ndikumana and Boyce (2003); Boyce and Ndikumana (2001); Lensink et al. (1998); Ajayi (1995). The paper is also related to research on the political economy of corruption and the new institutional economics such as examinations by Acemoglu et al. (2011, 2004, 2003); Alesina and Tabellini (1989).

1.2 Thesis Conceptual Framework

This thesis adopts the conceptual framework and definition of institutions postulated by Douglass North. This was the view that institutions are "the rules of the game in a society or...the humanly devised constraints that shape human interactions " in the economic, social and political spheres (North, 1990:3). These comprise both the formal rules (constitutions, laws and regulations) and informal constraints, such as norms of behaviour, and self imposed codes of conduct. However, this thesis is concerned more with formal constraints and takes a more macro-analytic perspective. This approach is more pertinent for economic development and reform (Williamson, 2000). It considers the political and legal rules of the game and the institutions of governance. Thus, it places emphasis on those factors that shape the institutional environment. This macro-analytic approach finds support from Williamson (2000) who argues that "although the institutional economics strand of principal interest is mainly with micro-analytic matters, there would be much less incentive to turn to the micro-analytic side if the macro-analytic approach had been more successful" (Williamson, 2000:172).

Within this framework, institutions can be divided into two broad groups following Acemoglu and Robinson (2012): the inclusive institutions and extractive institutions. This division applies to both economic institutions and political institutions. That is, inclusive economic institutions and the inclusive political institutions, and the extractive economic institutions and the extractive

political institutions. This thesis adopts an operational definition of “inclusive economic institutions” of Acemoglu and Robinson (2012) who define them as those institutions that, (i) protect private property (private property rights), (ii) judicial and contracting institutions that uphold contracts and enable individuals to enter into mutually beneficial agreements. More importantly, these institutions are seen to provide a level playing field by ensuring that individuals are not prevented from entering into businesses and choosing options that are best for themselves. Accordingly these authors make a compelling argument that broad-based political institutions are a prerequisite for building the kind of economic institutions from which growth can translate into sustainable development.

1.3 Contribution to the Related Literature

This thesis contributes to the literature in several ways. First, it produces a time series indices for institutions (related to de-jure political freedoms and civil liberties, property rights, political oppression and the defacto political instability) for Kenya over the period 1884-2010[15]. It discusses the evolution of these institutions over an extended period of time. It then tests the assumption that institutions are persistent-an assumption often made implicitly or explicitly in empirical work but not empirically validated. Secondly, the thesis investigates the mechanisms through which institutions influence economic development and identifies the specific types of institutions that matter for economic development in Kenya. The thesis further contributes to explaining economic growth in one African country by testing empirically whether institutional underdevelopment explains lack of foreign financing (capital immobility) in this country. In particular, the thesis reveals how property rights and contractual institutions effect international financing for economic growth. The thesis also falls within the Law and Economics, Economics and Political Science literature because it assesses the influence of legal and political characteristics of a

[15]Empirical evidence suggests that research should investigate specific institutions because aggregate measures such as the rule of law are too broad and fuzzy to contain meaningful information. Objective measures are generally preferred over subjective measures, and institutions should be as formally defined in legislation (de jure) and as factually implemented (de facto). However, it is worth mentioning that the ability to measure institutions does not imply the ability to create and modify institutions at will.

country on economic growth and international financial patterns. Lastly, the thesis contributes to the growing literature on institutions, by showing the extent to which institutional enforcement influences economic growth.

1.4 Thesis Outline

The structure of the thesis is as follows:

This research comprises six chapters. Chapter 1 provides an introduction to the thesis and highlights the general motivation of the thesis. Chapter 2 presents the measurement of institutions and the discussion on the evolution of institutions in Kenya over the period 1884-2010. Chapter 3 explores the interaction and causality between formal institutions and economic development in Kenya. Chapter 4 explores the interaction between formal institutions and foreign direct investment in Kenya. Chapter 5 explores whether political institutions matter for illicit financial flows from Kenya in the post independence period. Chapter 6 draws conclusions and summarises the thesis findings.

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Figure 1.1: Map of Kenya Showing Colonial Land Capture

Map No. 4187 Rev. 3 UNITED NATIONS
December 2011

Department of Field Support
Cartographic Section

Chapter 2

Evolution and Measurement of Institutions in Kenya

In leaving out history, institutions, and distributional considerations, neoclassical economics was leaving out the heart of development economics. "

– Stiglitz and Hoff (1999: page 390)

2.1 Introduction

THE literature from economic development emphasises the importance of property rights institutions and political institutions in the process of economic development (Acemoglu and Robinson, 2012; Rodrik et al., 2002; Easterly and Levine, 2001; Acemoglu et al., 2001; Engerman and Sokoloff, 2000; North, 1990, 1987a). It claims that property rights and political institutions are important because they provide the basic economic incentive structure that stimulates investment in the key development enhancing variables. These include human capital, physical capital and technological change. Institutions in this context are defined as the rules in a

society that are devised to constrain human behaviour and shape the interactions between agents in the economy. They comprise both formal rules (i.e. laws, constitutions) and informal constraints (i.e customs and traditions). This literature further claims that the enforcement of these rules is important to realise the desired economic outcomes (Aron, 2000; North, 1987a).

While the importance of institutions is widely recognized in this literature, there has generally been a paucity of research on their evolution over time and how they change, particularly in developing countries. This is despite Douglass C. North's emphasis that in order to understand the process of economic development, one must first understand institutions and how they evolve over time (North, 1993, 1990; North et al., 1971). In a number of his theoretical contributions, North further emphasises that in order to understand institutional change, one must first understand the stability characteristic of institutions and the interaction between political institutions and economic institutions. The limited amount of research on the evolution of institutions and how they change was also noted by North (1993) in his earlier contributions, and this is reflected in the following extract: "although Ronald Coase made the fundamental contribution of pointing out that when it is costly to transact, institutions matter, neither he nor most of his followers have explored how property rights and other institutions come about"(North, 1993, page 1).

The paucity of research on the evolution of institutions is a result of the difficulty of measuring institutions since they encompass both formal and informal constraints (Hodgson, 2009; Nelson, 2009; North, 2006). The informal constraints are more difficult to define. In their simplest form they include conventions and norms of behaviour (North, 1990). Although, formal constraints such as laws and constitutions might appear less difficult to study, they have not been studied in the economic tradition because of the difficulty to integrating the aspects of political and social theory with those of economic theory. Past attempts to measure institutions have been criticised. For instance, Glaeser et al. (2004) criticise conventional measures of institutions such as the Heritage Foundation Index of Property Rights, the International Country Risk Guide (ICRG) measures of property rights and investors protection, and Polity IV measures of political institutions, on the grounds that they measure outcomes and not permanent characteristics of institutions as postu-

lated by North (1990). The authors claim that these indicators rise with per capita income and are highly volatile. These characteristics, they argue, make them poor measure of durable features of institutions. However, even if one could refute these criticisms as unwarranted, a fundamental weakness remains-an omission of how institutions come about.

This chapter explores this largely overlooked important research issue of evolution in institutions in Kenya since 1880 to 2010. Specifically this research sets out to measure and explore the evolution of both political and economic institutions over a 130-year period in Kenya. The concern here is with how political institutions and economic institutions arise as a result of self-interest of those who hold political power. The focus is on formal institutions because this provides a way through which the dynamic interactions between political and economic institutions can be revealed. It fosters an understanding of how the equilibrium economic institutions are shaped by political forces over time. This approach meets North (1993, page 13)'s suggestion that since economic institutions (property rights) are specified and enforced by polities, an in-depth understanding of the way polities evolve is important to understand the way property rights evolve. This assertion is affirmed by Acemoglu and Robinson (2008, 2006)[1]. The long 130-year time span follows Kaufmann et al. (2003) who argue that the likelihood of observing significant changes over time in institutional variables increases substantially with the length of time under consideration. Such a lengthy time span is also chosen in order to unfold some nuanced historical data that might shed light on Kenya's economic development problem.

The choice of Kenya as a case study is motivated by several factors. First, the debates on Kenya's poor economic performance have pointed towards weak political and economic institutions as the main factors behind such performance (Aryeetey et al., 2012). These institutions are claimed to have been largely shaped by colonial imperialism and have persisted to the present day hence continue to affect development outcomes.Kenya was colonised by Britain. According to the argument developed and raised by Acemoglu et al. (2001) it should therefore have been endowed with

[1] Acemoglu and Robinson (2008, 2006) argue that the equilibrium economic institutions emerge from the interaction between political institutions, which allocate de-jure political power, and the distribution of de-facto political power across social groups.

robust and growth-enhancing institutions. However, since the colonial era, Kenya has been characterized by lack of socio-economic development and institutional weaknesses which arguably have been driven by the burning question of land. Five decades after independence, Kenya continues to experience poor socio-economic performance. Real GDP per capita income is estimated at US$1,160, an estimated 45.9% of the population live below the poverty line, and life-expectancy at birth is estimated at 61 years (United Nations Development Programme, 2010). All these socio-economic indicators place it among poor countries with a low human development index. The country has also experienced recurring social, ethnic, political and economic conflicts over land resources, and grapples with increasing inequality. Over the past four decades, the country also faced high corruption levels sustained by an entrenched system of political patronage.

A variety of factors have been suggested to explain Kenya's poor economic performance and recurring conflicts over resources. These include adverse climatic conditions, unfavourable terms of trade shocks, macroeconomic imbalances, policy mistakes and reversals. Other explanations include the contested property rights and contentious land redistribution policies that favoured the few political elite at the expense of the landless majority, weak institutions characterized by lack of checks and balances, disregard for the rule of law, corruption and contested property rights(Wakhungu et al., 2008). Yet such claims have not been empirically validated because of the absence of long-range data on institutions that could be used to understand the dynamics of these problems. These research uses such a dataset to investigate these factors. Therefore in this chapter, I provide such data set. The construction of new indicators is guided by the conceptual framework developed by Fedderke et al. (2001) and applied in a number of studies that have measured institutions in other African countries[2]. This framework is based on the legal statutes (formal laws) that govern immovable property and those that affect peoples' political and civil liberties.This framework to a large extent satisfies North's (1990)'s assertion that institutions are durable. By design using this data circumvents the major problems identified with conventional indices of institutions.

[2]See also (Fedderke and Garlick (2010),Zaaruka and Fedderke (2011b), Fedderke et al. (2011) and Gwenhamo et al. (2008))

The contribution of this study to the institution-development literature is therefore twofold. First, it explores the evolution of formal institutions (freehold and non-freehold property rights, political rights and civil liberties) that go back to the settlement of the British in Kenya and discusses this evolution over time. The exploration of the evolution of institutions over time fills the existing gap in the institution-development literature on the evolution of institutions, as identified by North (1990). This contribution further advances the political economy literature which centers on institutional creation and evolution (see Grindle, 2001). Second, the research provides a long range Time-Series data(1884-2010) on institutional indicators that can be used to validate assumptions that have often been made in the institution-development literature. For example, the data will be used for the first time to test the assumption that institutions are persistent-the assumption that has become the basis for the proof of the primacy of institutions hypothesis. Most studies in this literature typically assume that institutions are persistent, and therefore have a lasting effect on economic development. Yet this assumption is rarely tested due to the dearth of Time Series data on institutions going back to the colonial era[3] This hypothesis was popularized by Acemoglu et al. (2001) who develop an elaborate argument based on the colonial legacy of former colonies.

This new dataset will also be used to validate some of the claims made about Kenya's economic development. It will be used to answer questions around the causes of conflict over land resources. It will also inform factors that have constrained the other drivers of economic development such as foreign direct investment in this settler economy. By so doing, it will go a long way in informing debates relating to the measurement of institutions in the institution-development discourse in general.

[3]In particular, they contend that, in colonies where high mortality rates discouraged settlement by European colonialists, extractive institutions that were conducive to investment. The persistence of such institutions has hindered current economic development. At the other end of the spectrum, in places with low mortality rates, the colonialists settled and developed institutions–akin to those in Western Europe–that created the conditions for enhancing private investment and economic development.

2.2 Theory

2.2.1 Evolution of Economic Institutions

This section provides a brief discussion on the evolution of institutions. It summarises the different theories that have developed to explain how property rights institutions evolve and change. The influence of political forces on property rights institutions was first discussed in the early works of Knight and recently revived in the works of Acemoglu and Robinson (2006, 2008). These theoretical discussions serve as a basis for an exploration of the evolution of both political institutions and property rights institutions in Kenya.

Evolution of Economic Institutions-Property Rights

The evolution of property rights was explained succinctly by the early scholars such as Harold Demsetz who is said to be the founder of efficiency theory. This theory asserts that private property rights emerge as a result of increasing values in land which consequently leads rational economic agents to creating institutions that secure property rights (Demsetz, 1967). The theory makes a simplifying assumption that such rising values would always lead to universal preferences for private property rights. It argues that such preferences occur because, with rising land values, the potential gains from land transactions grow. However under an environment of insecure property rights such gains are impeded. This is because an environment with insecure property rights is characterized by increasing transactions costs which include costs of enforcement-an issue that was advanced by Ronand Coase and his followers in later writings (see Coase, 1937, 1988; Hart and Moore, 1990)[4].

[4] As an example of the emergence of private property rights, Harold Demsetz (1967) explores the conditions that gave rise to private property rights institutions among American Indians in Labrador. He first hypothesized that communities would abandon open-access regimes ("communal ownership," in his terminology) in favor of private ownership when it becomes economically efficient for the private owners to "internalize" the externalities created by communal ownership. To illustrate his thesis, he provided an example of hunting grounds of Native American tribes in Labrador in the early years after the arrival of European colonists. As Demsetz explains, prior to European colonization, communal ownership was an efficient way to manage hunting grounds because the value of the fur in hunted

The efficiency theory however made an overly optimistic assumption that as land values rise, rational actors will create institutions that create security of property. This assumption subjected it to criticisms by the political revisionism and new institutionalism theorists following Douglass C. North. The basis for this criticism has been the observed existence of insecurity of property rights in some countries despite rising property values. It is also based on the omission of information on how institutions evolve and change across time and space (Knight, 1992). According to the political revisionism thesis, property rights institutions evolve as a result of social conflict among actors with different and incompatible goals. In this view, "...institutions are a product of the efforts of some to constrain the actions of others with whom they interact". Thus the private property rights institutions are a reflection of the instruments of those in superior bargaining positions. However, although this thesis acknowledges the collective benefits that often result from institutional innovations, it asserts that such benign occurrences are incidental. The revisionists view further asserts that low quality institutions will persist if rulers are unwilling to anger those powerful constituents who benefit from the status quo. In conclusion, this thesis affirms that everyone would want secure property rights institutions and the lower transactions costs associated with them but the rulers are not willing to create such institutions because self interest.

The revisionists therefore propose that conflict and the extension of bargaining power are of primary importance for understanding the evolution of institutions and institutional change (Knight, 1992). Acemoglu and Robinson (2008); Robinson (2010) support this earlier views and show that indeed the equilibrium economic institutions emerge from interaction between political institutions, which allocate de-jure political power, and the distribution of de-facto political power across social groups. De-facto political power is that which is not allocated by institutions (such as elections), but is possessed by citizens/groups as a result of their wealth, weapons, or ability to solve the collective action problem.

The new institutionalism literature adds that the evolution of low quality institutions and their per-

animals was low. In pre-colonial times, the externalities caused by wasteful hunting habits were of a magnitude too low to concern society. Once the value of the furs rose due to the demands of French fur traders, the magnitude of negative externalities created by wasteful hunting practices became significant. At that point, it was efficient for the community to transit from communal ownership to private ownership of hunting grounds.

sistence are principally a result of incentives for corruption and the lack of institutional capacity of the ruling authorities to create and maintain better quality institutions (see North, 1993). Thus incentives for corruption by leaders is viewed in this context as a hindrance to the evolution of better quality institutions that secure property rights for everyone. The supporters of new institutionalism assert that due to the path-dependence characteristics of institutions, the reforms that could improve the quality of institutions are hard to implement.

2.2.2 Measurement of Institutions

The recognition of institutions as fundamental causes of economic development dates back to the evolutionary works of classical economists such as Adam Smith and Karl Marx. These economists accorded a central position to the role of property rights in the process of economic development. However, it was only in the 20th century that attempts were made to measure institutions.Proxies for institutions were first introduced in cross-country growth and investment equations just some two decade ago, and recently this literature has experienced a renaissance. These indices encompass the attributes of political institutions, social characteristics, social capital and measures of the quality of institutions that affect economic exchange (property rights institutions). This section reviews some of the most frequently used indicators in empirical studies.[5]

Property Rights Indicators

Security of property (property rights indicators) and risk of expropriation by government have been measured through a number of proxies. For instance, the Economic Freedom Index is used as a proxy for property rights. This index is compiled and published by the Frazer Institute. The Economic Freedom Index measures the degree of economic freedom in a country in four broad areas, namely, rule of law (property rights protection, and freedom from corruption); Limited government (fiscal freedom and government spending), Regulatory Efficiency (business freedom,

[5] See Aron (2000) for a complete review of these institutional indicators

labor freedom, monetary freedom); and Open Markets (trade freedom, investment freedom, financial freedom). These areas are judged on 42 data points and countries are rated on a scale of 0 to 10, with 0 representing the least economic freedom and 10 being the most. The index is updated on an ongoing basis and the latest index includes data for 141 countries from 1995 to 2014. Areas covered by the index include a country's legal structure and security of property rights. .

The Heritage Foundation index from the Heritage Foundation, provides another property rights index which is partly subjective (Miller et al., 2004). This index measures security of property rights on a score of one (very secure) or zero (non-existent). The index measures property rights according to the ability of individuals to accumulate private property secured by clear laws that are fully enforced by the state. It measures the degree to which a country's laws protect private property *and* the degree to which its government enforces those laws. It also assesses the likelihood that private property will be expropriated and measures the independence of the judiciary, the existence of corruption within the judiciary and the ability of individuals and businesses to enforce contracts. If the the legal protection of property is certain, then the country's score is one.If there are chances of government expropriation of property, the country's score will be zero. Countries that fall between two categories may receive an intermediate score. This property rights index has been made available annually since 1995.

The other often used property rights indicator is the Business Risk Indicator by the International Country Risk Guide (ICRG). This indicator comprises six measures of business risk. These are rule of law, corruption in government, quality of the bureaucracy, reputation of contracts by government, expropriation risk of private investment, and security of contract and property rights. This index is available for 135 countries from 1984 to 2014. This index ranks countries based on the composite scores ranging from zero to one hundred. Countries with scores ranging from 80 to 100 are considered low risk countries for investment(Keefer and Knack, 1995).

The last set of indicators that attempts to measure property rights is the Ease of Doing Business Indicators by the World Bank. This index measures the protection of investors/minority shareholders against directors' misuse of corporate assets for personal gain. It also judges the

enforcement of contracts in a country through various measures. These include the perceptions of corporate and securities lawyers; securities regulations; company laws; civil procedure codes and court rules of evidence. It covers 183 countries from 2003. The index is scaled from 0 to 10-with higher values indicating more investor protection.

Political Rights and Civil Liberties Indicators

Debates on how to measure political rights and political democracy have not yet been settled and no universal measurement exists. The most popular indices often used in applied work are the quantitative measures of political rights and civil liberties produced by Freedom House for 165 countries on an annual basis since 1972. While the political rights index is based on the degree of political competition and freedom of people to choose their political leaders freely, the civil liberties index is based on the rule of law and judiciary independence. The index is scaled from 1 (free) to 7 (not free).

The Polity IV database popularized by Jaggers et al. (1995) is often applied in empirical work to measure democracy and political freedoms as well as civil liberties (Polity, 2011). There are two main variables captured in this index; institutionalized democracy, which signals the existence of institutions or procedures through which citizens can meaningfully express their political preferences. The second is institutionalized index, which signals an autocratic state in which competitive political participation is suppressed. The dataset is available for these indices for the period 1800-2012 for some states only. Beck et al. (2001) provide another dataseton political institutions and attempts to measure political freedoms and civil liberties. This index comprises a variety of political variables, and the majority of which relates to political party fractionalization, checks and balances and the type of voting systems.

2.2.3 Criticisms of Existing Institutional Indicators

Despite their wide spread usage, most of these indicators have received criticisms particularly regarding their measurement. For instance, Glaeser et al. (2004) argue that frequently used measures of institutions such as Polity III and IV, International Country Risk Guide (ICRG), Business Risk Indicators, and World Governance Indicators (WGI), do not capture the element of permanent characteristics of institutions that North (1990) refers to in his definition of institutions. Furthermore, these authors argue that these indicators are outcome based measures[6] and do not capture formal constraints on executives. Similarly, Arndt and Oman (2006) criticizes the WGI measures as lacking comparability over time.

Kurtz and Schrank (2007) express their concerns about subjectivity in the construction of the World Governance Indicators, and argue that these indicators are perception-based measures and are highly correlated with each other. Voigt (2007) recognizes the foregoing weaknesses and proposes that measures of institutions should be precise, objective and take into account *de-jure* as well as *de-facto* elements of institutions. By doing so, the element of permanency would be embraced. The *de-jure* measurement of institutions accords well with North's definition that institutional measurements must reflect constitutional constraints on government, thus institutions are "rules of the game" not "outcomes of the game", and are therefore more permanent. With regard to transparency, Pande and Udry (2005) argue that the information that underlies most institutional indices is not fully public, and reflects the judgment of analysts at risk assessment organizations and therefore their credibility is questionable. This point is raised by Bollen (1980) who argues that most institutional indices only have tenuous links with the concepts they purport to measure.

In addition, Fedderke et al. (2001) argue that most of these indicators are measured over a short time span and therefore cannot be used to tease out the Time Series dynamics of economic growth and socio-economic development process. With special reference to Kenya, the Polity Indicators

[6]These indicators are volatile and change with changes in output of economies.

are available from 1963 to 2012[7] while the expropriation risk from the ICRG is available only for 16 years (1982 to 1997). These indicators can only be used at best in cross country studies thereby ignoring the heterogeneity of countries. The evolution and changes in institutions differ among countries. There is therefore a need for new datasets of institutional indicators that are based on objective and explicit criteria. Fedderke et al. (2001) provide the criteria that could be used to compute such long-term indices. This criteria is applied for example in Zaaruka and Fedderke (2011a), Fedderke et al. (2011), Fedderke and Garlick (2010) and Gwenhamo et al. (2008)[8].

2.3 Empirical Methods

We adopt the framework proposed and used by Fedderke et al. (2001) to construct institutional indicators for Kenya. This framework relies on the formal legislative history of a country[9] that governs immovable property, and that which affects political rights and civil liberties[10]. The annual ratings of the status of rights based exclusively on such legislative history and legal framework are performed against a set of standardized normative criteria. Changes in ratings reflect either improvement in the dispensation of constitutional rights or deterioration in the dispensation of such rights[11]. Although this framework avoids some of the problems inherent in the measurement of institutions, it has some weaknesses. The first weakness is the aggregation bias which results from the fact that the rating aggregates large quantities of information resulting in loss of information associated with aggregation. The second weakness is self induced bias which arises during the coding of the indices, resulting in less precise ratings (Bollen and Paxton, 2000 and

[7]Note that for some countries like the US and Canada, the dataset is available from 1800 to 2015.

[8]Building on the earlier work undertaken by Fedderke, de Kadt and Luiz (2001), these authors compute long term institutional indicators for Tanzania (1884-2008), Namibia (1884-2008), Zimbabwe (1946-2006), and Malawi (1964-1994).

[9]The formal legislative history and legal framework here refer to Acts of Parliament, and Amendments to already existing statutes as well as proclamations and parliamentary approved directives issued under the aegis of enabling legislation.

[10]This approach meets North's requirement that institutions be durable and measured by a set of formal legislation governing immovable property and constitutionally guaranteed political and civil liberties.

[11]For detailed methodology on how changes in legislative framework affects our indices, refer to the Institutional Index Computation Methodology/User's Guide attached to this thesis as appendix to Chapter 2)

Luiz et al., 2011). To minimize these weaknesses, we follow steps proposed by Bollen and Paxton (2000). These steps involve: (i) The development of a theoretical definition of the concept measured, (ii). Identifying sub-components, (iii) setting the rating scale for sub-components, (iv). Collection of rating information, (v) Rating of sub-components using the Delphi technique in which a team of experts assigns scores to each of the sub-components on an annual basis, (vi). Presentation of indices for validation to an independent panel of experts.

To increase the credibility of our measured institutional indices, we assess an extent to which these indices reflect the de-facto behaviour of agents in the country. We provide narrative discussions on whether the measured legal framework was actually applied in the Country. To do so we rely on events that happened in Kenya to capture the de-facto behavior and power. We try as much as possible to obtain the events that happened in the economy following the passing of legal instruments. We consider only those events that relate closely to the passing of the legal instrument. The choice of these events is based on available documented information. However, we acknowledge the possibility of omitted events that might have not been recorded/ documented. From the narrative discussions of these events we found that the de-facto evidence closely tracks the de-jure institutions with a lag. This close relationship between our measured de-jure institutions and de-facto evidence increases the credibility of our indices given also that de-facto measures of institutions have remained very difficult to construct.

To further increase credibility of our indices we compute the Spear-man correlation coefficients to investigate the extent to which our measures of *(i)* Property Rights (Freehold and Non-Freehold), *and (ii)* Political Rights and Civil Liberties (PrCL) correlate with the Heritage Foundation Property Rights index, the Freedom House indices for Political Rights and Civil Liberties, and the Polity IV index of political rights and civil liberties. It must however be noted that the Kenya index is build up from a careful examination of the central institutional changes and the subsequent events that occurred in the country, following a much different methodology than those of these other indices. Ex-ante it was not clear that different indices would be correlated. Second, our index is transparent about the events that drive it, making interpretation of subsequent analysis

much more clear. We found a very close association between our indices and these conventional indicators.

2.3.1 Identification of an Ideal State of Rights

Property Rights Index

Our definition of property rights follows Demsetz (1967) who defines them as the liberty or permission to enjoy benefits of wealth while assuming the costs which the benefits entail. This definition of property rights is more preferred to other later definitions such as those by Barzel (1989), and Alchian (1965) because it keeps the legalistic connotation of property rights. This is deemed more relevant in our context given that the essay attempts to measure property rights from the legal perspective. This definition of property rights is in contrast to Barzel's definition which disconnects property rights from any legal connotation arguing that the law is of course relevant for enforcement, but not for the definition of the concept itself. Moreover according to Barzel a property right is essentially an expected stream of net utility. In the interest of comparability of institutional indicators with those produced in earlier studies, we adopt the conceptual framework used in Gwenhamo et al. (2008). This framework borrows from Honore's definition of full liberal ownership and provides an ideal set of property rights. This ideal set of property rights is proposed by Fedderke et al. (2001) and is composed of 7 components. Thus, *(i) the Right to Possess; (ii) the Right to use; (iii) the Right to manage; (iv) the Right to capital; (v) the Right to security; (vi) the Incident of transmissibility and (vii) Liability to execution.*

Political Rights and Civil Liberties Index (Political Democracy Index)

Our definition of political democracy follows Bollen (1980) who defines political democracy as the extent to which political power of the elites is minimized and that of the non-elites is maximized. In this context, political power refers to the ability to control the national governing

system. It is therefore the relative balance of power between elites and non-elites that determines the degree of political democracy. Where non-elites have little control over the elites, political democracy is low and where the elites are accountable to the non-elites, political democracy is higher. Bollen (1986) further shows that political rights and political liberties reflect the political power of these two groups. Thus political rights and political liberties are two dimensions of political democracy, which remain to a large extent inseparable. The definition of democracy by Bollen is more preferred because it emphasizes the direct rule by citizens which then implies preservation of at least three basic dimensions of democracy: Protection of rights and civil liberties of society; elections and citizen's right to vote and independence of three arms of government. Sartori (1987) adds an interesting dimension to the definition of democracy. He argues that political democracy is a system in which no one can choose himself, no one can invest himself with power to rule and therefore no one arrogate to himself unconditional and unlimited power. The latter definition embraces the notion of limited arbitrary power of the executive.

In the interest of comparability of institutional indicators with those on political and civil liberties measurement, we again follow Gwenhamo et al. (2008) who set the standard normative ideal criteria against which the rating should be done. In this context, we assess the extent to which the Kenyan legal framework (the Constitution, Acts of Parliament, Amendments and Statutory Instruments) provides for the following rights and freedoms: *(1).Voting rights/franchise; (2) Freedom of Association; (3). Freedom of Assembly; (4). Freedom of Expression; (5). Extension of Arbitrary Executive Power; (6). Freedom of Movement; (7). Independence of the judiciary and Legislature; (8). Academic Freedom; (9). Limit of Government Secrecy/ indemnity; (10). Due process of law; (11). Freedom of religion; (12). Others*, which is a residual category that captures all rights and freedoms relating to political freedom and rights that cannot be classified under any of the specific dimensions. One key right relates to labour rights which were often repressed during the colonial period in Kenya, and other African countries in general. We only consider political rights and civil liberties for the majority of the population but we are aware that it would have been ideal to have computed separate indices for both the majority population and minority groups such as

white settlers[12].

2.3.2 Scaling and Rating

Our scaling and weighting criteria follows Zaaruka and Fedderke (2011b) and Gwenhamo et al. (2008). The scaling is performed on a range from 0 to 100 points for all institutional indicators, where 100 represents an ideal state of property rights being guaranteed under respective tenure regimes and 0 represents a complete absence of the right. The overall index in the case of property rights (both freehold and non-freehold) is composed of sub-components which are given different weights depending on their relative importance in an index. Ownership sub-component is assigned a weight of 20.Other sub-components that are more important in the overall index are each assigned a weight of 15 while the remaining are assigned a weight of 10. Similarly, for the political and civil liberties index, scaling is performed on a range from 0 to 100 points but a slightly different weighting is used. The first eight of the twelve sub-components are each assigned a weight of 10 and the other four are each assigned a weight of 5. In constructing each index, the sub-components are then summed up to give the overall status of the quality of the index across time.

Increases in the scores on sub-components indicate a move towards recognition of a specific right, and decreases indicate a move away from an ideal state in the system. Gwenhamo et al. (2008) note that in the case of political and civil liberties, an index ranging from 51 to 74 implies reasonable recognition of civil and political rights and some constraints on arbitrary government power, but may well include discriminatory laws related to various freedoms. If the arbitrariness of state power is only slightly constrained and the legal provisions of personal freedoms are weak, a country scores between 38 and 50, while a score between 13 and 37 indicates a state whose rights structure grants great arbitrary power to the state and most of the individual rights and freedoms are not recognized. Finally, a score ranging from 0 to 12 indicates a *de-jure* “totalitarian” state.

[12]Note that this is a worthwhile endeavor for future research

The weights used in Kenya are similar to those used by Fedderke et al. (2001) and Gwenhamo et al. (2012) for South Africa and Zimbabwe respectively. We have decided to use the same for the purpose of undertaking comparative studies.

2.3.3 Validation of De-jure Indices and their Relation to the De-facto Evidence

The constructed institutional indicators were validated by a team of four experts drawn from the Constitutional Law and Economic History at two universities in Kenya and University of South Africa. Professor Simuyu Vincent who is an expert in History from University of Nairobi and Professor Ben Sihanya who is an expert in Intellectual Property, Constitutionalism & Education Law from University of Nairobi Law School, were chosen from Kenya while Professor Mahao Nqosa who is an expert in Constitutional law and Associate Professor Mosito Kananelo who is an expert in law were chosen from South Africa. The purpose of validation was to check whether the indicators adequately capture the items which they are supposed to measure satisfactory. The choice of the experts was purely non-subjective since we submitted a request to the relevant universities to appoint experts in Constitutional Law and Economic History who could comment on our indices. We did not have any information ex-ante regarding their opinion and affiliation to any political institution or organization that could jeopardize their assessment of the computed indices. Given the process through which these experts were chosen, we consider such experts to be relatively free of bias. It must also be noted that the choice of a mixture of experts from two different countries (i.e. Kenya and South Africa) for validation was meant to act as a cross validation check of opinions on the indices and this also served to reduce bias to some degree. There was also no payment for validation except a small token of appreciation made after receiving validation reports, and this preserved their independent point of view. The comments from these experts were then incorporated accordingly.

2.3.4 Assumptions underlying our Indices

Our measurement of institutions is based on a number of assumptions: First we assume that the effect of institutions are due both to their substantial content and their factual implementation. Based on this assumption, we trace the implementation of rules through events analysis that we provide in our narrative discussions. The implication of this assumption as pointed out by Voigt (2013, 2007) is that both de-jure and de-facto institutions need to be measured; otherwise, it is impossible to separate the substantive content of a rule from the effect of enforcing a rule. Thus neglecting to measure de-jure institutions implies that all of them are completely identical which is not the case. Although we do not provide de-facto measurement, we provide narrative discussions to assess an extent to which the measured rules were enforced. (b) We assume that constraining effect of institutions largely depends on their factual implementation and enforcement. This again is provided for in our narrative discussions. In fact, in the context of Kenya, rules past largely reflected the behavior of political actors and to some large extent de-jure rules were followed by de-facto enforcement with a lag. Again this assumption follows the suggestion by Voigt (2013) that "measures of institutions aiming at including the factual enforcement of institutions need to reflect the behaviour of enforcers" (c) We further assume that factual behavior is likely to be determined by more than one institution hence we attempt to include most potential institutions by disaggregating our indices into sub-components. By doing so, we believe we are able to identify those institutions that drive the effects from those that are only marginally relevant. However, at the end we still sum up the sub-components into one index, their individual measurement is reported.

2.4 Results and Discussions

2.4.1 Political Institutions in Kenya: a Historical Perspective

Historical Context

In pre-colonial times, the political landscape of the territory that has become known as Kenya was diverse. The interior was inhabited by indigenous African communities whose ancestors migrated from various parts of the continent. Some communities, such as the *Ogiek* were hunters and gatherers. Some such as the *Agikuyu* and the *Miji Kenda* developed agricultural economies while others, including the *Maasai* and the *Samburu* practiced pastoralist forms of production (Mosley, 1980; Ochieng and Maxon, 1992). Yet, other groups such as the *Luo* and the *Abagusii* developed an economy based on crop cultivation and livestock keeping. Production was primarily for collective subsistence rather than individual accumulation. The kinship system was the basis of ownership of factors of production which included land, livestock and labour. Communities were often acephalous or segmented as there was little inclination for large-scale state formation (Brantley, 1981). Instead the largest political unit was the collectivity of a few families related by blood. These groups were typically organized in a hierarchical manner under the leadership of chiefs, or elders whose role (among other things) was to arbitrate over intricate matters affecting members of their communities. The coastal regions on the other hand have a very different history. They were inhabited by the Swahili people, originally Bantu speaking groups that over the centuries had mixed with Arab traders, to form a unique city-based fusion of African and Arab culture and language.[13] Between the sixteenth and the eighteenth centuries, coastal city states such as Mombasa, Malindi, Pate, Lamu was under Portuguese control before succumbing to the domination of the Omani Sultan of Zanzibar in the nineteenth century. The economic activity revolved around trade of ivory, cotton, silk, ceramics, jewelry, spices and slaves (Ochieng and Maxon, 1992).

The Berlin conference in 1884-1885 set the rules of colonial occupation and marked the start of the scramble for Africa by European powers. British and Germans who expressed interest in East African territories signed the 1886 Anglo-German Agreement by which Germany would lay claim on the Coast of present day Tanzania while Britain would retain present day Kenya and Uganda. Initially, the British government granted a concession for the administration of these ter-

[13] Historically, The Swahili people could be found as far North as Mogadishu (Somalia) and as far south as the Ruvuma River (Mozambique).

ritories to a chartered commercial company-the Imperial British East African Company (IBEAC) (Hindlip, 1905). The territory under administration was larger than any Western-European country and stretched from the Eastern Coast of Africa to the Kingdom of Buganda, nearly 639,000 km^2. The Company's main responsibility was to ensure the exportation of goods and agricultural produce, and to facilitate the construction of a railway connecting the Coast (Mombasa) to Lake Victoria (the so-called Uganda railway) that cost the Treasury an amount of 5.5 million pounds (Galbraith, 1972). After the IBEAC collapsed in 1895, the British Foreign Office took over the administration and proclaimed a protectorate over the British East Africa—the East Africa Protectorate. The imperial strategy upon assuming power was unclear beyond securing the recovery of the funds sunk into the construction of the Uganda railway. Later the primary objective was effective occupation and the development of a self-financing settler dominated economy based on agricultural production and exports. As we will see later, the institutions upon which this objective rests involved land alienation for European settlers who actually held political power, African taxation, and African migrant and forced labour, and the weakening of political rights and civil liberties of natives. The discussions that follow will present first the development of civil and political liberties in Kenya since 1895 to 2010. A discussion will follow on the evolution of property rights which was framed by the desire to alienate land for European settlers who held de-facto political power in this economy during the same period.

Development of Civil and Political Liberties during the Protectorate Era (1895-1920) in Kenya

In 1895, Britain declared dominion over the East Africa Protectorate (what later became Kenya) with its headquarters in Mombasa (Anderson, 2000). The advent of British rule in 1895 changed the political landscape in Kenya. A number of laws, regulations and orders restricting political rights and civil liberties were introduced.[14] As early as 1897, the East Africa Order in Council, No.14 vested all powers to make laws for the administration of the protectorate in the hands

[14]Note that regulations were passed prior to 1895 that affected primarily people who were residing under the authority of Sultan of Zanzibar.

of the Commissioner.[15] The Order in Council established a formal judicial system in Kenya, and marked the first step towards constitutional dispensation, and it granted the Commissioner powers to legislate over matters relating to customs. Thus, the Native Courts Regulations of 1897 empowered the Commissioner to make rules for administration of "Native courts" , including alterations to any native law or custom. In addition, the Commissioner was granted extensive powers of detention, deportation and restrictions on the freedom of movement of Africans through the enactment of the Native Courts Regulations No.15 of 1897. These laws were formalized in 1908 through the Removal of Natives Ordinance, No.17 of 1908 (which was succeeded by No.18 of 1909). The restrictive laws were consistent with the Vagrancy Ordinance of 1896 and were the precursor of the African Passes Ordinance of 1900 which aimed at controlling the natives' freedom of movement between rural areas and urban centers as well as within urban centers.

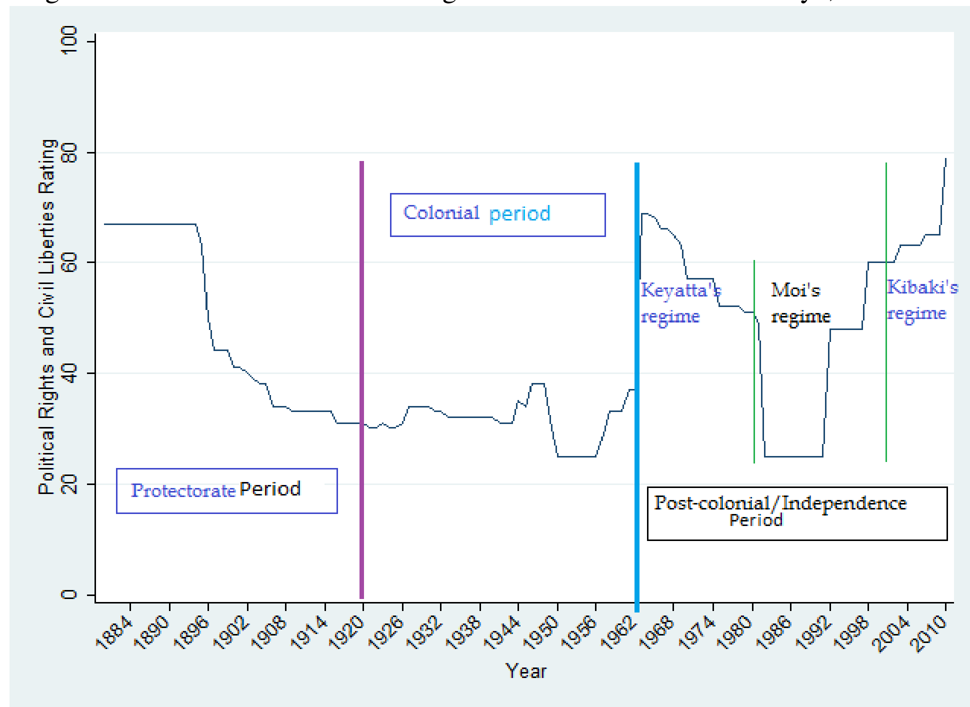
To further strengthen the commissioner's control of movement of natives, the Vagrancy[16] Ordinance of 1896 and African Passes Ordinance of 1900 were passed. The Vagrancy law and the African Passes Ordinance were formal legislation meant to control the movement of indigenous people , and to limit their behaviour and access to the places that were reserved for British settlers. The Vagrancy Ordinance in combination with Labour Regulations of 1898 were also used as a tool to direct African labourers to the growing number of European settlers requiring labour on their agricultural estates (Beier and Ocobock, 2008). The promulgation of these discriminatory laws that curtailed the freedom of the African majority is responsible for the decline of the civil liberties and political freedom in the first decade of British rule. See Figure 2.1. A Figure plotting the aggregate political and civil liberties index and its sub-components are shown in Appendix A, Figure 2.9 *and 2.10*[17].

[15]An Order in Council is an order issued by the British monarch or the Governor-general upon the advice of the Privy Council.

[16]According to these laws, a vagrant was anyone found asking alms or wandering about without any job or visible means of subsistence. Those suspected of vagrancy by police could be arrested without warrant, imprisoned for up to three months. While incarcerated, vagrants were put to work until they had earned enough to pay for repatriation.

[17]In recognition of the fact that prior to 1895, the political landscape in Kenya allowed for free movement of natives and permitted other civil liberties although there was no universal suffrage, we assume our political and civil index to start rating at some non-zero value. Caution must also be made from the onset that the index represents the *de-jure* political rights and freedoms within the enacted legislation, and is not intended to capture whether or not legislation was actually applied. On the same note, the index does not separate political rights from civil liberties since the two

Figure 2.1: Evolution of Political Rights and Civil Liberties in Kenya, 1884-2010



None of these laws applied to the settlers who exerted considerable pressure to secure political representation and have a greater say in the decision-making processes of the Protectorate (Berman and Lonsdale, 1992). In response to the settlers' demands, the British government established a new Chamber in 1905, the Legislative Council (LEGCO), responsible for making laws in the Protectorate.[18] It was exclusively composed of European settlers and administrators. In 1913 the settlers were given the right to elect their own representatives to the Legislative Council. In contrast, Africans were denied the right to elect members to the LEGCO or to be elected to this council (Brantley, 1981). By 1919, this state of affairs was legitimized by the Legislative Council Ordinance No. 16 which stipulated that only literate British subjects who spoke English, and owned property of a certain value could vote and/or stand for elections. Needless to say Africans did not meet these requirements and were *de facto* disenfranchised.

are not fully independent. Finally, the index recognizes the likely commensurability issue because of the lengthy span under which it is computed given that Kenya went through a series of political and legal regime shifts which make it difficult to assume unified political system.

[18]The LEGCO was established through Order in Council of 1905 and Royal Instruction of 1907.

Given the competing interests of settlers and natives, it is not surprising that the establishment of the LEGCO did not improve the political rights of the latter group. Between 1905 and 1920, further restrictive laws were passed that controlled various aspects of the life of the natives. In particular, laws curtailing freedom of movement and regulating labour relations were critical for the development of the settler' economy. Facing the Africans' reluctance to work for the settlers, the colonial authorities enacted the Hut Tax Regulations of 1901, not only as a *public finance instrument,* but also as a device to force Africans to offer labour to the settler economy. The tax was charged on all huts used as dwellings at a rate of 2 rupees per year. It was subsequently raised to 3 rupees from 1903. By 1910, a poll tax was also formally introduced through the Native Hut and Poll Tax Ordinance (No. 2) of 1910. The requirement for tax payment in cash or labour implied that the natives, given their limited cash holdings, had to work for the settlers to meet their tax obligations. The European attitude toward these taxes is well summed up by a quote from a prominent settler,Lord Hindlip:

> *"I am sure that as far as possible taxes should be paid entirely in labour or in cash. A demand for cash should be created among the natives, who would then have to obtain coin in order to pay their taxes."* Lord Hindlip, 1905.

In most instances these laws were passed in response to demands from the settlers. For instance, following pressure from settlers, the Native Porters and Labour Regulations of 1902 gave employers authority to forcefully impose terms of service on their employees and insured them against employees' desertion.[19] Similarly, the enactment of the Masters and Servants Ordinance of 1906 and its subsequent amendments tightened the constraints upon African workers[20]. This law added to the severity of the penalty for breach of contract by making desertion a cognizable offense.The police were allowed to arrest deserters without a warrant (Anderson, 2000). By banning the

[19] The natives who served as porters in transportation of goods throughout the Protectorate were not allowed to desert work. Should they do so, they would be liable to hefty fines.

[20] Its subsequent amendments were made in 1912, 1915, 1916, 1918 and 1919 but in the main, these amendments just tightened the constraints upon employees and added to the severity of punishment, making desertion an offense, allowing the police to arrest deserters without a warrant and increasing the penalties for breach of contract (see Anderson (2000)).

formation of trade unions, these laws also constituted a serious limitation to the freedom of association. These laws eroded employees' freedom of choice and liberty[21]. They further limited freedom of association since they banned the formation of trade unions. During the same period, the settlers used the Poll and Hut Tax Ordinances of 1901[22] as a way to force the natives to work on their plantations because generally natives had little incentive to work for settlers who had expropriated their land (Brantley, 1981). This forced labour limited rights enjoyed natives as they were forcefully made to work. Thus, under the pretence of monitoring more efficiently the supply of labour, this system ensured a very tight control on the natives' freedom of movement and labour rights.This led to a decline in our political rights and civil liberties index.

By 1912, the demand for labour in the newly established British settlers' plantations, and public works had risen substantially. To meet this demand, the Native Authority Ordinance of 1912 was passed, which empowered local chiefs and headmen to introduce forced labour. Labourers were forced to work up to 60 days a year for lower wages than voluntary workers in public works such as railway construction and portage. The forced labour policy was complemented by the introduction of the Native Registration Ordinance (No.15) of 1915 *(Kipande)*. This law required all African males aged 15 and above to wear around their neck an identity document (*Kipande*) that recorded their personal details and their employment history. Those in breach of their contracts were arrested, flogged and imprisoned. In addition, the criminalization of organized labour, and the *Kipande* system ensured that wages remained low as workers could be imprisoned for demanding wage increase or better working conditions (Kinyatti, 2008). Thus, under the pretense of monitoring the supply of labour more efficiently, this system ensured a tight control on the natives' freedom of movement and labour rights. The passage of these labour laws is reflected in a decline in our index.

Towards the end of the protectorate period, freedom of expression of Africans was also limited by the colonial government through the extensive use of sedition and censorship laws. For instance,

[21] For instance, the natives who were serving as porters in transportation of goods throughout the protectorate were not allowed to desert work, if they did, they were to be fined heavily.

[22] The compulsory tax in the protectorate had to be paid in cash and given that natives had limited "cash holdings", it meant that they had to work in order to get some wages so that they could pay compulsory tax obligations.

the Newspaper Ordinance of 1906 and the British Protectorate (Defence) Order in Council (No. 181) of 1916 empowered the Governor to declare any publication seditious, and to prohibit the importation into the protectorate of any newspaper, book, or document deemed seditious. This order was part of the emergency measures introduced during the First World War (1914-1918). It increased the arbitrary powers of the Governor who was given *(i)* the authority to authorize the trial of civilians by court martial (Wanjala and Kibwana, 1997); and *(ii)* the authority to appropriate and control Africans' property[23].

Political and Institutional Trajectories during the Colonial Era (1920-1963):Civil Rights and Political Liberties

During the 1920s, political associations emerged[24] that sought to represent Africans on the political and social front. The natives became increasingly more vocal in demanding direct political representation (Kinyatti, 2008). The colonial authorities granted some concessions by enacting the Local Authority Ordinance (Amendment) of 1924 that established the Local Native Councils (LNCs) as the organ of representation for Africans. Despite some improvement in the freedom of association and assembly, this legislation was mainly tokenistic since the LNCs were under tight government control. Its members were appointed by the European field officers and remained under the authority of the district Commissioner.

Meanwhile new laws such as the Special Districts (Administration) Ordinance of 1934 extended colonial administrators' power to arrest, restrain, and detain natives and seize their property. Collective punishment for offenses committed by fellow tribesmen was legalized by the 1933 Stock and Produce Theft Ordinance (No.18) in response to rising cattle raiding and theft experienced by European settlers. However, the struggle for political rights and civil liberties intensified with the creation of numerous political movements (Young Kavirondo Association, Kavirondo Tax payers Association, Kikuyu Central Association, Kenya African Study Union, and the Kenya African Union) (Berman and Lonsdale, 1992). This pressure resulted in the repeal of the Native Passes

[23]The powers of this Order in Council were lifted in 1919 when the war ended.

[24]For instance, the East Africa Association (EAA) and the Young Kavirondo Association (YKA) were formed in 1921 and 1922 respectively.

Ordinance of 1900 in 1942 which allowed free movement of labour. In 1944, the colonial government nominated Eliud Mathu as the first African representative in the LEGCO in an attempt to quell some of the demands of the Kenyan political movements. The number of African representatives in the LEGCO subsequently rose to four in 1948 and six in 1952. Meanwhile emergency powers were afforded to the Governor during and after the Second World War by the Emergency Powers Order in Council of 1939 and the Emergency Powers Ordinance, No.12 of 1948.

The failure of the political movements to attain any significant reforms from the colonial authorities shifted the political initiative to younger and more militant figures. Years of conciliatory rhetoric but little substantive action from the colonial government showed its limits in 1952, as the Mau-Mau uprising began(Kinyatti, 2008). Mau-Mau was an armed local political movement directed principally against the colonial government and the European settlers(Kinyatti, 2008). The movement was Kikuyu-dominated although it is commonly believed that it represented the nationalist struggle against land expropriation and colonial rule. As the uprising began, the Governor declared a state of emergency (Mau-Mau Emergency Regulations of 1952) with broad powers to amend, revoke or suspend any detention orders. Prior to the conflict, the Public Order Ordinance of 1950 and Penal Code Amendment (No.2) of 1950 had made forced oaths illegal and liable to death sentence[25]. The application of these laws increased during the uprising (Wanjala and Kibwana, 1997). Suspected members of the Mau-Mau movement or individuals speaking openly against discrimination and the repressive colonial policies were detained without trial over a number of years. Thus, over 50 000 Africans were detained and over 4 000 were sentenced to death (Wanjala and Kibwana, 1997).

The colonial government had a two-pronged strategy that consisted of *(i)* defeating militarily the resistance movement; and *(ii)* placating the majority of the African population by making concessions to reduce support for the Mau-Mau. After a four-year war (1952-1956) the British eventually defeated the Mau-Mau resistance. The war was particularly costly to the Kikuyu populations

[25]The Mau-Mau oaths The oath was generally characterized by the following: (1) it was militant and implicitly threatened violence against Europeans and those who betrayed the movement, and (2) it was compulsory and people taking the it were not allowed to leave. If they do, they would be beaten and threatened with death.

who were forcefully deported and resettled in "protected villages" which according to Anderson "were little more than concentration camps to punish Mau-Mau sympathizers" (Anderson, 2005). Thus, more than a million civilians "were corralled, often against their will, into settlements behind barbed-wire fences and watch towers" (French, 2011) and faced under-nourishment and disease. Towards the end of the conflict the colonial authorities made a number of social and political concessions: *(i)* land reform increased African land-holding while relaxing the ban on the production of coffee and cash crops; *(ii)* African unions were authorized to support wages; and *(iii)* in 1954, Africans were permitted to participate in politics as per the recommendations of the British Parliamentary delegation that visited Kenya during that period. The first general elections held in 1957—under the Lyttleton Constitution—were characterized however by unsatisfactory franchise as the suffrage was restricted on the basis of income, education, age, tenure at work, and military service, which left the majority of Kenyans disenfranchised.

Between 1957 and 1963, British rule practically came to an end with the passing of the Lennox-Boyd Constitution in 1957 which replaced the Lyttleton Constitution that the natives had rejected. The Lennox-Boyd Constitution provided for an increased African representation in the LEGCO and in the Council of Ministers. It further provided for an undiluted democracy based on universal franchise and respect for the rights of all individuals regardless of their race. In 1960, negotiations for self-governance were initiated during the first Lancaster Constitutional Conference in Britain. The subsequent conferences (second and third) ushered the independence Constitution of Kenya. Evidently, the end of colonial rule would witness a shift of political and economic power to the indigenous population. But what would be the resulting political, economic and institutional order?

Independent Kenya's Political and Institutional Trajectory: Civil Rights and Political Liberties

In 1963, the Independence Constitution established a federal government popularly known as *majimbo* with an executive, and an independent judiciary with security of tenure. The Constitution established an independent Electoral Commission, a multiparty system of government, a Bill of Rights and Freedoms, and safeguards for minority rights and political devolution of power

to the country's regions. The first general elections were held in Kenya, and for the first time universal adult suffrage was exercised (Hornsby, 2013). The new constitutional dispensation guaranteed the separation of powers and the protection of the fundamental rights of all citizens. Our index rises during this period reflecting the move towards the recognition of political rights and civil liberties in Kenya. However, during the post-independence period, and under the new political rule by the indigenous population, a number of amendments to the Constitutions would the be passed and these amendments would set in place a new political, economic and institutional order. This new state of affairs would then see reversals in the constitutional provisions of the Independence Constitution as self interested politicians dismantle the constitution to serve their interest. In the process they created a "limited access orders" in which the political rights and civil liberties of ordinary Kenyans were undermined.

Soon after independence, Kenya's first president Jomo Kenyatta (1964-1978) dismantled the parliamentary system and established a centralized presidential regime in which the President concentrated most powers in himself at the expense of Parliament and the Judiciary. Amendments to the Constitution ensured the abolition of the Senate and the curtailment of decentralization and devolution[26]. The 1964 and 1966 Amendments[27] to the constitution in particular granted extensive powers to the executive. These included the power to detain people without trial, to appoint and dismiss public servants[28], to create and abolish offices in the public service without necessarily consulting the Public Service Commission and special emergency powers—granted by the Preservation of Public Security Act No.189 of 1966—without approval of Parliament. The Preservation of Public Security Act empowered the President to exercise special emergency powers that could lead to curtailing the freedoms of movement, assembly and expression. By 1969, Kenya became *a de facto* a one-party state when the Constitution was once again amended with a view to suppressing the new opposition party (KPU) formed by the deserted members of the ruling Kenya African National Union (KANU) (Gibbon, 1995)[29].In 1975, the Constitution Amendment Act

[26]See the Act No.40 of 1966 and Act No.16 of 1968

[27]see Act No.14 of 1964 and Act No.17 of 1966

[28]The Act provided that all persons serving in the public service did so at the pleasure of the President.

[29]The Constitution of Kenya Constitutional Amendment Act No.17 of 1966 provided that members of the National

No.14 allowed the President to overturn any court decision that found electoral offenses against his favoured candidates, thereby subverting the principle of free and fair elections.[30] Thus, during Kenyatta administration, the Constitution was repeatedly under attack to suit the interests of the ruling elites who soon reverted to the authoritarian structure of governance of the colonial era (M'Inoti, 1991).

Daniel Arap Moi succeeded Kenyatta in 1978. The early years of his presidency (1978-1992) marked a period when the executive showed even deeper contempt for the Constitution (Wanjala, 2000). Although, constitutional amendments were fewer, they were more far reaching. Some of these amendments completely altered the constitutional architecture of Kenya and severely undermined the enforceability of the Bill of Rights. President Moi's reign was characterized by relentless effort to curtail citizen's rights and freedoms, and a systematic assault on the judiciary (Constitution of Kenya Review Commission, 2005). In 1982, Kenya became a one-party state *de jure* through the passing of the Constitutional Amendment Act No.7 of 1982[31]. This amendment undermined any pretensions of Kenya's commitment to democratic principles. It outlawed all forms of political opposition and gave KANU-the then ruling party, the monopoly of power. In effect, the holding of political office as well as the right to vote were conditional on being a member of KANU[32]. As a result, the majority of Kenyans were disenfranchised. Moreover, the President's arbitrary powers were further extended by the Constitutional Amendment Act No.14 of 1986. This Act empowered Moi to appoint and dismiss the Attorney General, the Controller and Auditor General, the Judges of the High Court and the Court of Appeal. The security of tenure for these public offices and the separation of power of the executive from the judiciary were severely undermined.

Assembly who had resigned from the party on whose ticket they stood for elections had to vacate their seats and seek a new mandate from the electorates. This amendment was intended to respond to the outflow of sitting members of parliament from KANU to Kenya People's Union (KPU). The formation of KPU was led by Jaramogi Odinga Odinga who has served as a vice-president from 1964 until he resigned in 1966.

[30]This amendment was allegedly passed to redeem Paul Ngei, a close friend of President Jomo Kenyatta, who was found guilty of election offenses ((Wanjala and Kibwana, 1997)).

[31]See Section 2A of the amendment

[32]The constitutional amendment was motivated by leaked information that George Anyona and Oginga Odinga had intented to form a new political party.

After an attempted coup d'etat in 1982 by junior officers of the Kenyan Air Force, the country experienced a period of great political tension and repression[33]. During this period, there were massive public demonstrations against the one-party state, the incarceration of many Kenyans who were regarded as a threat to state security, and the killing of many citizens during public demonstrations. At the height of this state of repression, Kenya passed the Constitution Amendment Act No.20 of 1987. This Act made all capital offenses (e.g. treason, murder, robbery with violence and attempted murder) non-bailable. In so doing, the Legislature actually interfered with the the presumption of innocence and the Judiciary's discretion to award bail and it compromised judicial independence and impartiality. Likewise, the 1988 Constitution amendment (Amendment Act, No.4) further eroded the rights of suspects and accused persons by authorizing the police to hold suspects of capital offenses for up to 14 days before they appear in court, instead of 24 hours provided in earlier versions of the constitution.

By 1992, the assault on freedom and political rights under Moi's presidency had turned Kenya into an authoritarian State (Branch and Cheeseman, 2008). This led to agitation for reforms which were headlined by calls for the introduction of a multiparty state. In 1992, a group of Kenyan politicians and the international community and religious leaders exerted considerable pressure on the government for political reforms. The government, at the time, was dependent on donor funding and the donor community threatened to cancel aid and budgetary support unless reforms were carried out (Branch and Cheeseman, 2008). Consequently, the government repealed section 2A of the Constitution, which then returned the country to multiparty democracy. The return to multiparty democracy was accompanied by other fundamental amendments which provided for the fundamental rights of the citizens. These included the repeal of the Chief's Authority Act of 1994; the Public Order Bill of 1994; the Preservation of Security (Amendment) Bill of 1994 and the Elections Offenses Act of 1998. The Preservation of the Public Security Act had allowed for indefinite detention without trial and restriction on freedom of movement and the Chiefs Authority Act had given local administration chiefs immense power to restrict the freedom of movement

[33] This repression has been officially acknowledged by the government. It is part of the terms of reference for the Truth and Reconciliation Commission. Several suits have been filed against the government seeking compensation.

and association of their subjects. The repeal of the Public Order Act removed all restrictions on freedom of association, assembly and expression. Later President Moi introduced the Peaceful Assemblies Bill as a replacement for the Public Order Act. However the new Bill still restricted the free assembly, association and operation of groups in Kenya.

During the same period, further Constitutional amendments were made to restore the security of tenure for judges of the High Court and the court of Appeal and the Attorney General, and members of the Public Service Commission. These amendments included legal aid scheme for victims of human rights violations(Constitution of Kenya Review Commission, 2005). In 2002, the Political Parties Act of 2002 was passed to provide for the formation and registration of political parties in Kenya. This ensured that every citizen who has attained the age of eighteen years or older had the right to, (i) participate in political activities which are intended to influence the composition and policies of the Government and (b) to join any political party of his own choice. The Act further strengthened people's freedom of association and freedom of assembly and suffrage in the country. Towards the end of 2002, the Societies Act was amended to allow for freedom to register lawful organizations and political parties. These lawful organizations and political parties had been denied registration in the past.

Following this series of amendments, the Constitution was viewed as a patchwork of political expediency and people had lost confidence in its validity and legitimacy as a tool for governance, and protection of human rights for all. This led to a call for a complete review of the Constitution. The review process was intended to entrench accountability and transparency, ensure democracy and the widest political participation of the people.[34]. In 2002, the new government under the leadership of President Mwai Kibaki was elected on the platform of further Constitutional reforms and the fight against corruption. However, after assuming power, the government lost its reformist zeal. There was little support for reducing the powers of the presidency. However, the Law Society of Kenya, Civil Society, the Donor Community and Church Leaders and some members of the public exerted further pressure on government to facilitate the constitutional review process

[34]Note that when Constitutions are framed and adopted, they tend to reflect the dominant beliefs and interest, or some compromise between conflicting beliefs and interests, which are characteristics of the society at the time.

(Branch and Cheeseman, 2008; Fahnbulleh, 2006). In 2004, the Constitution of Kenya Review Act was passed to provide for a mandatory referendum to ratify a new Constitution, yet the review process appeared to be a tall order with resistance from many organized interest groups. It was only the post-election crises of 2007 and the scale of national violence that expedited the review process. The crisis demonstrated that getting the new Constitutional was no longer an option but a necessity.

Soon after the post-election crisis, Kenya passed two substantive laws: The Constitution of Kenya Review Act of 2008 and the Constitution of Kenya Amendment Act of 2008. These two laws set the procedure for the replacement of the constitution through a referendum in which the electorate was to ratify or reject the proposed constitution. The former Act also made provisions for the completion of the review process. In August 2010, Kenyans exercised their sovereign right by overwhelmingly adopting the new Constitution. This exercise marked the end of a long journey towards a new constitutional dispensation. This Constitution is as a result of the struggle of million of Kenyans who desired fundamental changes in political, social and economic governance. The new Constitution was passed along with a number of repeal Acts such as the Indemnity Repeal Act of 2010 and Official Secrets Act of 2009 (Repeal). The new Constitutions reaffirms the existing political and civil rights of all Kenyans. It provides for a comprehensive realization of the state of rights and civil liberties of the people in the country. It subjects the Executive, the Judiciary and the Legislature to strong checks and balances. No longer is any organ of state above the law. It is therefore not a surprise that Kenyans overwhelmingly supported the Constitution for it provided a framework within which the citizens could achieve "protection of life, liberty and property".

2.4.2 Evolution of Property Rights Institutions and the Question of Land in Kenya

*"The greater part of the wealth of the country [*Kenya*] is at present in our hands...This land we have made is our land by right—by right of achievement."* Speech by the Governor of Kenya, 1946

The land question, which continues to divide Kenya today, has its root in the colonial institutions. In particular, the property rights institutions that were created through the policy of settlement promoted by the colonial government with a view to recouping the investment cost of the railway network linking Mombasa to Uganda. History suggests that property rights during the pre-colonial period were governed by customary law—which comprises unwritten customs and traditions and was based on social and cultural arrangements among community members. In the customary tenure system, land ownership was vested in the community represented by the council of elders, clan head or the chief who was in charge of allocating land to individuals or families (Wanjala, 2000 and Ojienda, 2008). As long as those individuals cultivated their allocated plot, no one else had the right to use it or to benefit from its produce. Farmers in effect held use rights only and were unable to alienate or to transfer ownership or the use of that land to anyone else.

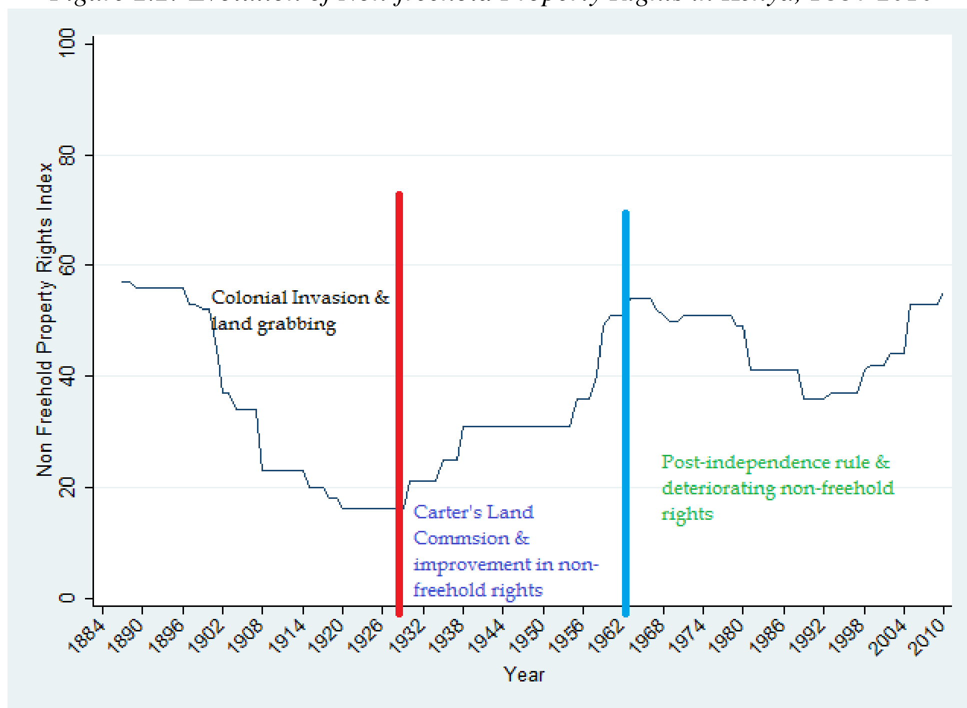
The customary property system is at odds with English property law because of its disregard for individual ownership. It was regarded by colonialists as *repugnant* to English justice (Sorrenson, 1968). It was also considered as an inferior form of land ownership that discouraged commercial farming and agricultural development in general (Coldham, 1978). The main argument is that because of its communal nature the customary tenure system is inherently incapable of accommodating "modern" and capitalistic production methods. As the first Europeans settled in Kenya, the colonial government introduced the English freehold tenure system to protect the settlers' land rights after expropriating these rights from the natives. During British rule (1885-1962), a substantial body of laws, ordinances and regulations were passed to strengthen the freehold tenure system while crippling the communal tenure system. This legislation benefited British settlers and transnational corporations to the detriment of indigenous communities. The property rights system was instituted along racial lines and legitimized land grabbing and policies that would entrench the new *status quo*. For instance, after the expropriation of land from the *Kikuyu* populations, natives were not allowed to own land in the so-called *"White Highlands"*, neither were they allowed to cultivate cash crops, nor allowed to own large livestock populations. This introduction of freehold property rights created two distinct property rights systems—communal and non-freehold rights for Africans and freehold rights for European settlers—that were seemingly

engaged in a zero-sum interaction. Given these premises, we construct two indicators of property rights, non freehold and freehold rights.

The Non-Freehold Property Rights

Figure 2.2 plots the non freehold property rights index and its sub-components are shown in Appendix A, Figure *2.5* and 2.6. The Figure shows that the non freehold property rights index was relatively stable during the pre-colonial period. No formal laws were enacted and passed which infringed enjoyment of rights of the people but such rights were limited to user right and rights of access. Given the limited rights people enjoyed during the pre-colonial period, the non-freehold index is assumed to start at some non-zero scale.

Figure 2.2: Evolution of Non-freehold Property Rights in Kenya, 1884-2010



Land grabbing by British settlers and the deterioration of the indigenous customary land rights (1885-1930)

In 1885, Kenya became a British protectorate[35] following the Berlin Conference that divided Africa among European powers. During the very early days of imperial rule, the question of land appropriation was a major concern to colonial administrators because the status of Protectorate did not carry with it any title to land. To resolve this conundrum on a legal basis, the British government imported the 1882 Property Act of India to the East Africa Protectorate in 1897.[36] This enabled the enactment of the Land Regulations of 1897 and the East Africa Acquisition of Lands Order in the Council of 1898 that became the stepping stones of the development of the settler economy in the East Africa Protectorate (Okoth-Ogendo, 1991). The former authorized the commissioner to issue certificates of occupancy renewable after 21 years, while the latter stipulated that all land was *unowned* unless proven otherwise—i.e. unless held under private ownership—and as such was under the sovereignty and dominion of the British Empire.

The question of the economic sustainability of the railway was another major preoccupation for the Foreign Office—concerned with the recovery of the 5.5 million pounds spent on the construction of the railway network. The settlement of European farmers was thus encouraged to ensure the Treasury received a return on Britain's investment in the railway. The idea was that settlement would foster local development and provide a constant flow of commodities to be transported to the coast for export. However, the existing property rights regime in the Protectorate was considered unattractive by potential settlers. In 1902, the promotion of European settlement became an official policy (Ochieng and Maxon, 1992) with the promulgation of the Crown Lands Ordinance. The Ordinance proclaimed that all land in the Protectorate was Crown Land, and as such belonged to the British government. In addition, wherever Africans vacated or deserted the land, that land would be considered waste and revert back to the Crown. The alienated land would subsequently be allocated to European settlers who could acquire ownership titles or simply lease the

[35] Although Kenya was declared a protectorate, the understanding of British Authorities in the protectorate was that British Crown could deal with land in the territory in such manner as he or she pleased. The legal interpretation of the order that declared Kenya a protectorate is that there were no indigenous peoples in the territory, and if there were, their rights were totally irrelevant to Great Britain's plans for expanding its empire (Ndungu, 2006). Yet, this was constitutionally incorrect because according to the British law, unless the Crown established an original title to land, normally as a consequence of sovereignty, it was illegal to make grants of land in fee or under any form of tenure recognized in British law Sorrenson (1968)

[36] This Law was originally enacted by the British government to expropriate land in India but was later used in other protectorates and colonies.

land on the basis of a 99-year term—instead of 21 years as formerly provided by the Ordinance of 1897. In conjunction with the East Africa (Lands) Orders in Council of 1895, 1898, 1901, and the land regulations of 1897, the 1902 ordinance provided a comprehensive legal framework that governed agricultural, commercial and residential land tenure in the Protectorate. It did not allow, however, the settlers to hold land for speculative purposes and gave the commissioner the powers to repossess any land that was not fully paid for.

The land rights of the indigenous people were further undermined by the extension of the Property Act of India of 1882 to the protectorate in 1897, and the enactment of the East Africa Acquisition of Lands Order in Council of 1898. This Order in Council declared that all land was unowned unless proven to be otherwise, and as such was under the sovereignty and dominion of the British Empire. The exceptions were those lands that had property titles giving ownership to private persons. This was a greatest challenge for the native people especially the Masai people who practiced a nomadic way of life and rotational farming, because of the high risk of expropriation. Okoth-Ogendo (1991) notes that this legislation set in motion the development of the settler economy in the East Africa Protectorate and resulted in the demise of the African economy.

During the period 1900 and 1903, the Crown Lands Ordinance of 1901, the Crown Lands Ordinance of 1902, No.21 and Land Rules and regulations of 1903 were passed in an attempt to further strengthen the Crown's authority over the expropriated lands. The non-freehold index exhibits a sharp decline during this period because these laws deprived indigenous people of their rights to land and made them tenants at the will of the Crown. The Crown Lands Ordinance of 1901 authorized the Commissioner to sell, grant, lease or dispose of Crown lands[37] in the Protectorate. The Ordinance further permitted the Commissioner to issue temporary certificates of occupancy to Africans on their own land because all land under non-freehold had been declared Crown land. Moreover, when Africans ceased to occupy their land, it could be sold or leased as if it was unoccupied land without any consent of any tribal chief or the owner of land[38].

[37]The East Africa (Lands) Order in Council, 1901, defined Crown lands as all public lands within the East Africa Protectorate which at that time were subject to the control of his/her Majesty, and all such lands were expropriated through the application of the Indian Land Acquisition Act of 1882.

[38]The fact that African were only tenants at will of the Crown is clearly reflected in a number of cases decided

Between 1908 and 1914, formal segregation in land ownership between British settlers and indigenous people was introduced through the enactment of the Crown Lands Bill of 1908 and the Land Title Ordinance of 1908. These proclamations gave the Governor (as the commissioner was then called) the power to reserve land from sale, lease or other disposal of land which in his discretion was required for the use or support of members of the native tribes of the protectorate. However, the Governor had power at any time to cancel any gazette of such reservations at his discretion (section 85 of the Ordinance). The arbitrary powers given to the Governor under these statutes threatened the land rights of indigenous people. This is reflected in Kenya's lower scores on our index during this time.

The lowest score on the index during the protectorate period, occurs between 1915 and 1920. This mainly reflects the passing of the 1915 Crown Lands Ordinance, No.22 and the Kenya Annexation Order in Council of 1920. The Kenya Annexation Order in the Council declared Kenya a British Colony with consequence that all land was then formally under the jurisdiction of the Crown[39]. With these two pieces of legislation, any right to land by an individual native was formally extinguished. Their land use, management and produce were affected by the Production and Livestock Ordinance, No.3 of 1926 and the Agricultural Produce Export Ordinance, No.44 of 1921 which were used to regulate the production, grading and storage of African produce. These Ordinances limited the production of livestock and crops, and controlled what crops could be produced by indigenous people. They thus prevented African property development.

As argued by Bromley and Cernea (1989), the willingness of the colonial state to legitimize and protect different property regimes is partly explained by the state's perception of the importance of the citizens holding different types of property rights. Since promotion of the indigenous population's landholding was in conflict with the development of the settler economy, which was the colonial state's priority, it was no wonder that the customary property regimes central to the

against Africans when they made claims for their lands which were expropriated. For instance, in the case of **Ole Njogo** vs. **Attony General** (1913-1914).

[39]The Crown Lands presumably included even land on which huts were built with their appurtenances and land that lay fallowKinyatti (2008). The protectorate status has seldom prevented the British Government from establishing institutions that enabled it to expropriate land from indigenous people for white settlement.

local populations, economy were grossly undermined.

Land Reforms: A move towards the improvement of indigenous property rights (1930-1960)

Towards the end of the 1920s, the British Colonial Office recognized that the settlers would not have security over the expropriated land which had been allocated to them unless some form of stable property was established within the African land holdings. This necessitated the British to pass laws that could improve African's land rights and can be seen as a strategy pursued in order to silence them. During the same period, the birth of land politics in which Africans voiced their land grievances through organized opinion also added pressure on British Colonial Office to pass land laws meant to improve African land rights. As the pressure mounted, the Native Lands Trust Ordinance, No.9 and the Native Tribunals Ordinance, No.39 were passed in 1930. These statutory instruments provided for the security of tenure and protection of the rights (i.e.occupational rights) of natives in the reserves. They also created the Central Board (Land Trust Board) to control and administer matters relating to land in African reserves.[40] However, all land in those reserves remained Crown land. An important feature of these laws was that different tribes for whom land had been reserved had a right of perpetual succession, subject to the power of the Governor.[41] The passage of these land laws led to a slight improvement in the rights enjoyed by indigenous people and this is reflected as higher scores.

Between 1935 and 1942, a number of amendments to the land laws were made that were meant to improve the rights of the indigenous population in the reserved lands (i.e. the Native Lands (Amendment) Ordinance, No.36 of 1934; the Native Lands Trust (Amendment) Ordinance, No.28 of 1938[42] and No.51 of 1939; the Crown Lands (Amendment) Ordinance, No.27 of 1938. These amendments followed the recommendations made by the Morris Carter Land Commission that was set to make inquiry into various land issues in Kenya.[43] The amendments empowered the

[40]The Board never had African representation and consisted entirely of the Europeans

[41]See section 8, section 15 and 15A of the Native Lands Trust Ordinance, No.9 of 1930 and Part II of the Native Trust Ordinance.

[42]Section 68 of this ordinance declared that "in respect of the occupation, use, control, inheritance, succession and disposal of any land situated in the native lands, every native tribe, group, family and individual shall have all the rights which they enjoy or may enjoy by virtue of existing native law and custom or any subsequent modification thereof..."

[43]The inquiry included the following matters: (i) the working of the 1930 Native Lands Ordinance, (ii) the needs of

Governor to make available certain areas of Crown lands for African use then and in time to come. Furthermore, they set precise boundaries for land reserved for natives and that reserved for British settlers, thus formally making provisions for segregation based on racial and ethnic groupings. A large number of Africans were to be formally confined to the newly formed "native reserves" and control of such reserves was removed from the Crown and vested in the Native Lands Trust Board. However, all native rights outside the "native reserves" were extinguished[44] and the ultimate authority concerning land matters within the jurisdiction of the Board was conferred on the Governor. The passage of these laws led to further improvement in the rights of indigenous people hence an improvement in our non-freehold property rights index. Nonetheless, natives could not enjoy their full property rights since during that period Kenya Ordinance No.28 of 1938 was passed to provide for compulsory reduction in the number of stock, flocks or herds in any of the native lands because the British felt that if Africans owned large flocks within the limited reserve areas, they would agitate for larger tracks of land expropriated to British settlers.

Between 1943 and 1951, the British consolidated their colonial rule against a tide of competing political and land claims made by various tribes. The agitation for land rights resulted from severe population pressures and limited land resources in the native reserves and the continued dissatisfaction of natives who were barred from owning land in the "Highlands"- areas that were considered fertile and conducive for agricultural purposes. The squabbles on land issues culminated in the 1952 Mau-Mau[45] revolt, which signaled that land issues could no longer be ignored. But until the revolt erupted, the British Colonial Office did not pass any land law that could affect land rights. This is reflected in our index which at that time remains relatively flat at the 1938 level.

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the native population, present and prospective, with respect to land, whether to be held on tribal or individual tenure, (iii)the desirability and practicability of setting aside further areas of land for the present and future occupation of communities, and bodies or individual natives of recognized tribes, (iv). the nature and extent of the claims exerted by natives over land alienated to non-natives, and the making of recommendations for the adequate settlement of such claims whether by legislation or otherwise.

[44] See section 3 of the Native Authority Ordinance, No.20, 1940.

[45] The Mau-Mau was an armed local political movement directed principally against the colonial government and the European settlers. The movement was Kikuyu-dominated although it is commonly believed that it represented the nationalist struggle against colonial rule.

In response to the Mau-Mau revolt, the British Colonial Office passed the Swynnerton Plan in 1955[46] and the Agricultural Ordinance, No.8 of 1955. Both the Swynnerton Plan and Agricultural Ordinance were perceived as strategies to address land agitation since it was perceived that land agitation emanated from insecurity of land in the "native reserves" and poor utilization of land by natives[47]. These two instruments essentially provided the comprehensive extension programme aimed at intensifying agricultural production directed principally at native farmers. They further recommended an individualized form of land ownership (freehold tenure) in the native lands[48] based on the English model. The Plan laid the basis for consolidation of fragmented holdings or the enclosure of communal lands, through which some African farmers were to be provided with "economic size" farm holdings. The individualization of title and the creation of private property rights in the native lands was supposed to provide farmers with security of tenure and help solve the problems of scarcity and accessibility of land. Due to these legal instruments, our index scores improves further starting in 1955. This improvement continued until 1960 when the index reaches its peak during the colonial period.

Following the Swynnerton plan, Kenya entered into a period of major land reforms. The aim of land reforms was to provide individualization of tenure and strengthen security of tenure under the customary system. A number of land statutes and rules were enacted and passed. The most important of these laws were: the Native Lands Registration Ordinance, No.27 of 1959 and the Land Control (Native Lands) Ordinance of 1959[49]. These laws guaranteed individual land ownership in native land areas and introduced a measure of control over land transactions in the newly registered areas. The Kenya Native Areas (Amendment) Order in Council of 1958 provided that upon registration of individual titles to farms in native lands such farms cease to be vested in the Trust Board and become exclusively owned. The Native Lands Registration Ordinance, No.27 of

[46]The plan was drawn up by the East African Royal Commission in 1955 and named after R.J.M. Swannerton who was the then Deputy Director of Agriculture in Colonial Kenya.

[47]For instance, the background to the plan argued that if Africans could be provided with private land ownership and assistance to intensify their agricultural production, they would be able to make sufficient returns from their lands and abandon their demand for redistribution of land held by Europeans

[48]see Paragraph 12 of the Swynnerton Plan.

[49]This Ordinance is also known as the Land Control (Special Areas) Ordinance, No.28 of 1959.

1959[50] and the Land Consolidation Act of 1959 provided for demarcation, adjudication and consolidation of areas in the native reserves and introduced a system of registration which drastically changed the legal status of the land registered. The land reform statutes converted customary tenure system something similar to freehold system with the effect that all rights enjoyed under this customary system were equivalent to those enjoyed under the European property law system. Sections 22, 27 and 89 of the Native Lands Registration Ordinance of 1959 articulated that the right of occupation under native law and custom, if shown in the register was deemed converted into tenancy from year to year[51] and if it was not shown in the register, it was extinguished[52]. The law provided further that first registration could not be challenged, even if it had been obtained fraudulently[53].

The land reform process also led to the passing of the Land Order in the Council of 1960 that provided for the conversion of (Native) Leasehold into freeholds, and for the acquisition of land in the Highlands by Africans or the post-colonial State through sale on a *willing-buyer, willing-seller* basis. The passage of this Ordinance led to the observed improvement in the index of land rights under customary tenure between 1960 and 1962. In 1963, when Kenya gained independence, individualization of land tenure had taken center stage and all legal and policy frameworks were geared towards entrenching the status quo.

However, the following limitations are worth noting regarding the land reform process and laws passed in 1959. First, Gatheru (2005) notes that most Africans were too poor to buy land, therefore the majority of the people who were actually settled were not the people whose land had been expropriated. Instead a group of elites with vested interests in the continuity of colonial property and political processes had emerged while millions of Kenyans remained landless squatters in their own country. Second, Ndungu (2006) argues that the reforms exacerbated land conflicts and landlessness in the country as a few elites registered land that did not actually belong to them. Once land was registered, the registration could not be challenged even if it was fraudulently

[50]This Ordinance was later renamed the Land Registration Ordinance for Special Areas.
[51]see section 22 of the Ordinance
[52]see section 27 of the Ordinance
[53]see section 89

registered. This created the phenomenon of *Absentee Landlords* and *squatters*[54]. Third, the reform programme revealed the true extent of landlessness and aggravated the situation of those who were already landless but accommodated under customary tenure. This was because their privileges along with other customary rights not noted on the register were extinguished by the process of registration. Finally, the registration firmly placed African holdings within the principles of European property law thereby creating an estate much larger in quantum held by few African elites than Europeans during the colonial period (Okoth-Ogendo (1991)).

The Non-freehold property rights regime after independence (1963-2010)

The post-independence era can be separated into three periods corresponding to the administration of each of the Kenyan presidents: Kenyatta (1963-1978), Moi (1978-2002) and Kibaki (2002-2010). At Independence in 1963, Kenya inherited and adopted the entire set of all colonial land laws that had been enacted to address the interests of the British settlers. The independent Government made superficial amendments to those laws, such that Ordinances were simply renamed Acts, Crown was substituted with *President*, Crown Land was renamed *Government Land*, and where Crown referred to the British Monarch as an institution, it was substituted with *Government*.

The independent government had little incentives to change the colonial laws, for several reasons. First, the newly elected government had a desire to grab part of the land formally known as native reserves, Crown land and that formally owned by British settlers, and give it to a few political elites and their associates or those with political connections. So conversion of non-freehold to individualized tenure holding was seen as a strategy to achieve these self interest motives. Second, political leadership was convinced by the capitalist mode of production to an extent that it considered traditional systems of land tenure inefficient and acting as a disincentive for farmers to develop their holdings. In fact, this conviction was grounded on the Swynnerton Plan of 1955

[54]The term “absentee landlords” refers to persons who seldom if ever use land of which they are registered owners and such land, if it is managed at all by agents who may not have been validly appointed by the registered owner and many agents are thought to be self-appointed with no legal authority over land, while the term “squatters” refers to a person who occupies land that legally belongs to another person or institution without the owner’s consent.

which had become the main land policy instrument from which most land laws were derived. The Swynnerton Plan had argued that customary tenure was an obstacle to agricultural development and that customary rules of inheritance could destroy the benefits of consolidation. It also posited that under customary tenure individual farmers had little incentive to develop their holdings. It was hoped that the security of title conferred by registration would create a land market that would enable farmers owning plots not viable or unworkable fragments to sell them to those who would be in a position to develop them more effectively. This would then create a landed and a landless class, a process which Roger Swynnerton called a normal step in the evolution of a country (see Coldham, 1978).

In pursuit of this self-interested motive and the desire to promote capitalism in the economy, in 1963, the Registered Land Act, No.25 of 1963 was passed along side the Independence Constitution of Kenya. While the Constitution guaranteed protection of all rights including property rights, the Registered Land Act governed land formerly held under customary law and encouraged further individualization of tenure in line with the agronomic arguments mooted in the Swynnerton Plan. Specifically, it provided that "the registration of a person as the proprietor of land shall vest in that person absolute ownership of that land" and of a lease "shall vest in that person the leasehold interest described in the lease".

In 1965, further new set of laws were passed that gave the President absolute powers over land. Such absolute powers were to enable him alienate land to his affiliates. These new statutes however restricted the non-freehold land rights of local communities in particular, hence the observed deterioration in the property rights index. The first new set of laws passed following independence included the Constitution of Kenya (Amendment) Act, No.28 of 1964 and the Constitution of Kenya (Amendment) Act, No.14 of 1965, which provided that with abolishment of regions in 1964, all land that was formerly vested in the councils was relocated to the Government of Kenya, and that the President or any person authorized by the President could make grants or dispossess any estates, interests or rights in or over land that was vested in the Government of the Republic of Kenya, and that the Commissioner of Lands was authorized to administer the trust land. These

Amendments centralized land administration in Kenya without the consent of local communities (Ndungu, 2006).

Property rights continued to be eroded in 1967 as the legislature passed the Land Control (Special Areas) Act No.34 of 1967 and Agricultural (Amendment) Act of 1963. These two Acts were meant to control all transactions on land under control areas[55]. The Land Control Act limited the transfer, exchange, partition or disposal of any land in a land control area, and provided that such transactions were subject to the approval of the Land Control Board. The Land Control Board had the authority to give the final decision on any land application and its decision could not be questioned in court. The Land Control Act also contained a segregation clause that any sale of land conditional on approval of the Board had to be made only to citizens of Kenya and not to any foreign individual or company. The Agricultural land Act gave the minister all powers to determine ownership of agricultural lands and regulate planting of cash crops such as coffee and tea. These crops could neither be planted nor taken out without a ministerial permit. This Act remains one of the most authoritative land use legal documents. During the same period, the Land Acquisition Act, No.47 of 1968 was passed to make provision for compulsory acquisition of land for public benefit.

In 1969, the government recognized that most pastoral groups were not satisfied with the English model of tenure system which the government had adopted. Such a colonial legacy aggravated them because they believed colonial government did not understand the real nature of pastoral cultures. In response, the Government passed the Land (Group Representatives) Act, No.36 of 1968 which recognized "group ownership" of land. Although the Act seemed to protect and recognize group ownership, it reflected a preference for individualized tenure in an attempt to demarcate communal land holdings into separate units or group ranches. The intention of the Act remained that land should be held communally in accordance with applicable customary law and practices. The group ranches were meant to overcome the problems of overstocking and overgrazing associated with communal pastoral lands where resources are free and subject to

[55]Land control areas were former native trust lands

misuse. This was the first time that customary tenure was given formal recognition in the written laws. The Land Adjudication Act, No.35 of 1968 also strengthened the index as it provided for demarcation and registration of titles under trust land. However, Southall (2005) notes that the group ranches scheme was abused by elites and persons registered to hold the ranches in trust for the community invariably resorted to selling pieces of land, to the community's detriment.

In 1978 after president Moi was sworn in as the president of Kenya, substantive changes to the administration of land law were introduced. The series of legislative amendments passed weakened customary tenure rights. The amendments were meant to strengthen the powers of the president and his administrative organs on land use matters and allocation without necessarily changing the provisions of the previous laws. They included: (1) the Land Control (Amendment) Act, of 1981, (2) the Magistrates Jurisdiction (Amendment) Act of 1981 and (3) the Trust Land Act (Amendment) 1982.

Furthermore, Moi's regime witnessed amendments to the Chief's Authority Act and the Local Government Act of 1963. These two pieces of legislation provided Chiefs and Local Government Officials with extensive policing powers on land issues. The Chief's Authority Act conferred on administrative officials the power to issue orders regulating and prohibiting land use. The Act for example allowed Chiefs to require persons to plant any specified crops for the support of themselves and their families if the area concerned is suffering from or is threatened with a shortage of foodstuff. The Local Government Act also conferred on local authorities far reaching powers to regulate land use on the trust-land under their jurisdiction. The Act conferred on the authorities powers to alter boundaries, and to order compulsory expropriation of land for public use. Country Council by-laws made under section 201 empowered Country Councils to prohibit or regulate the performance of certain activities on land.

Upon the return to a multiparty democracy system in 1992, a positive shift occurred in the legal framework directed at reducing the arbitrary powers of the president in land matters and to re-establish the powers of the land commission to deal with issues of land. The amendments to the Constitution of Kenya passed in 1992, 2001 and 2002 positively affected land rights under

the non-freehold tenure. These amendments further reinforced protection of property rights and re-established Trust Boards. In 2007, the National Land Policy was drafted following the recommendations of the Ndungu Land Commission of 2002. The 2007 draft Land Bill gave recognition to customary land tenure rights and set out clear procedures to be followed in times of adjudication, demarcation and conveyancing of land held under customary tenure. Finally, the New Constitution of Kenya of 2010 reaffirms existing rights that any Kenyan may acquire and own land anywhere in Kenya. The Constitution introduced a limitation on the same right which affects non-citizens, non-citizen companies and other non-citizen bodies. All these groups may not own land absolutely. The land acquired by non-citizens may only be held under a lease (i.e. Article 40 (1)). It reaffirmed that it is illegal for the government to arbitrarily deprive any persons of their property, whether the right to land held is registered or not, whether the right is one of full ownership or less than ownership (such as in the form of an customarily accepted right to access an area for pastoral use), and whether the owner is an individual, family, corporate association, group or community.

The Constitution further gave stronger protection to all interests in land including Community Lands (current Trust Lands) (Articles 40 (2) and 63 (4)). It however sustained the right of the State to take a person's property if needed for public interest, but only on the basis of prompt payment of full and fair compensation. The holder or lawful user of the land is also guaranteed access to a court to challenge the legality of the proposal or the amount of compensation being offered. It further made it explicit that compensation must be paid not just to titled owners but also to those who occupy land in good faith but do not hold title (this includes occupants on Trust land, and lawful occupants on government land. It could also include urban squatters of long-standing living on government land in cities, or in parks and reserves and other areas). However, the 2010 Constitution did not extend constitutional protection of property to those who are found to have acquired their land in an illegal manner. This is at odds with the current situation whereby under the Registered Land Act, those holding land under first registration are protected against challenge, even if they are known to have obtained such lands by fraud.

Furthermore, the constitution introduced an important limitation on what constitutes public interest. The 1963 Constitution and other laws (Land Acquisition Act) defined public interest broadly (as most Land Acquisition laws do) and enabled the government and Country Councils to take away people's land on the presumption that this appropriation is for some local public benefit. Article 66 of the 2010 Constitution limits this by requiring the parliament to enact a law to ensure that investors/investments in property provide benefit to local communities and their economies.

Freehold Property Rights

Figure 2.3 plots the overall freehold property rights index and its sub-components are shown in Appendix *A, Figure 2.7* and *2.8* . The Figure shows that freehold ownership of land in Kenya dates back to the 1880s, although no formal legislation was provided to govern such freehold rights during the pre-colonial era. Historical evidence shows that prior to 1887, certain tribes in Kenya (i.e. the Kikuyu tribe) already had private rights over their land resources (see Overton, 1988 and Coray, 1978). Hence, our index starts counting at some positive value of the rating scale.

Figure 2.3: Evolution of Freehold Property Rights in Kenya, 1884-2010

Land grabbing by British settlers and the evolution of freehold property rights (1885-1920)

With no formal legislation governing freehold land rights, the British Colonial Office introduced a formal set of laws to regulate land rights through the adoption of the Foreign Jurisdiction Act of 1890 that gave recognition to the creation, acquisition and conveyance of Crown land in the protectorate, and recognized the conveyance of ownership or lease through issued title deeds for settlers. Subsequently, the land regulations of 1894 (which were later amended to land regulations of 1897) were enacted by the Imperial British East Africa Company. These regulations were meant to provide for freehold land ownership of the British settlers within the Sultan's dominion. For the land outside the dominion, certificates of occupation for a period of 21 years, which later were extended to 99 years were provided.[56] In 1889, the East African Order in Council was

[56] Specifically the regulations provided settlers with leasehold certificates for a period not exceeding twenty one years but renewable. No fixed rent was specified on them. Grazing leases were also issued which defined that not more than 20 000 acres could be held in one block, and the annual rent was half an Anna an acre. On agricultural land, leases of not more than 2000 acres might have had a rent of 1/2 anna an acre for the first five years....homesteads were of 100 acres at a rent of 4 annas an acre for the first years, during which time occupation was compulsory.

passed, which introduced English law into the system and promulgated a set of land regulations. Here therefore our freehold index starts to rise.

Between 1895 and 1902, there was a complete transition in the protectorate from mere holding of certificates of occupancy to complete freehold ownership of land by the settlers and formalization of land registries. Our index scores therefore rise in this period. In response to the demands of the British settlers for security of tenure under freehold system, the colonial office enacted the Crown Lands Ordinance of 1901 and the Crown Lands Ordinance, No.21 of 1902. The purpose of these two sets of legislation was to govern alienation of land for agricultural, commercial, residential and other purposes for British settlers. These laws were applied in conjunction with the East Africa (Lands) Orders in the Council of 1895, 1897,1901 and the land regulations of 1897 to alienate land to British settlers and provide them with security of tenure.

From 1902 onwards, British settlers could acquire freehold title and long leases over land in the protectorate as provided by section 4 of the 1902 Crown Lands Ordinance, No.21.[57] Despite the dispensation by this legislation of freehold tenure, the British settlers considered it repugnant to the sanctity of title because it did not allow individuals to hold land for speculative purposes[58]. It also prohibited grants of land in actual occupancy of Africans and gave the commissioner powers to repossess any land for which no full payment had been made.

The settlers applied further pressure on the authorities to provide an improved legal framework for the freehold tenure system. In response, the colonial office passed the 1908 Crown Land Ordinance and the Land Titles Ordinance of 1908 with the aim of providing further improvements in the legal framework for freehold tenure arrangement. These Ordinances made land a tradeable good by making a provision for holding of titles to land and established a land Registration Court and provided for adjudication of land claims. This meant that British settlers could secure the land they had expropriated from indigenous Africans. This favourable legal framework attracted

[57]This ordinance gave the commissioner the power to sell freeholds in Crown Land to any purchaser in lots not exceeding 1000 acres and for any sale above this figure, the consent of the Secretary of the State was to be solicited.

[58]see section 5 of the 1902 Ordinance

settlers from Britain, South Africa, Australia and New Zealand. By 1914, there were about 1,000 settlers in Kenya.

In 1915, the index rises sharply following the enactment of the Crown Lands Ordinance No.22 of 1915 which set the stage for what settlers saw as a secure foundation for organization of their settlement. This Ordinance extended the 99 year-lease to 999 year-lease thus stimulating a new wave of immigration. It provided for a comprehensive registration of titles and removed the restrictions on the number and size of farms a person could purchase. This allowed *de facto* land acquisition for speculative purposes. The 1915 Ordinance reaffirmed that land not occupied by European settlers was Crown Land and subject to Governor's power of alienation and demarcated the land into *"scheduled areas"* (for European settlement) and *"non-scheduled areas"* (for African Reserves). By doing so, it gave statutory recognition to the practice of land reservation in the Highlands to Europeans, and created "natives" reserves away from areas scheduled for European settlement. Finally, the Registration of Titles Ordinance No. 26 of 1920 was passed. and superseded all existing legal regimes throughout the country. Land titles issued under the new Ordinance were deemed conclusive evidence of absolute and indefeasible ownership. This legislation set the stage for what settlers finally regarded as a secure foundation for the organization of their settlement.

The freehold property rights during the Colonial Era (1920-1963)

In 1920 Kenya was declared a British colony. With status of a colony, the door was open for constitutional advance in any direction and at any pace that the British government could choose and the colony came under the British Settlement Act of 1887. Following the declaration of colonial status, the Registration of Titles Ordinance No.26 of 1920 was passed. This Ordinance superseded all existing legal regimes throughout the country, and a certificate issued under the new Ordinance was declared conclusive evidence that a person named a proprietor of land had absolute and indefeasible ownership thereof. The period between 1920 to 1929, marked the first phase of the organization of native reserves to make way for further European settlement and the legal framework enacted thus far had provided the property system tailored to the needs of free enterprise in that there was a degree of freedom from state intervention. In 1927, the Hilton

Young Commission made a land recommendation which provided for the setting of boundaries to demarcate land for Europeans and Africans, and this strengthened freehold, which is reflected in the index.

The status of freehold land rights continued to improve between 1930 and 1933 owing to the passage of the Native Lands Trust Ordinance, No.9 of 1930 that proclaimed that land in actual occupation by Africans was the only land declared Crown lands while that in settlers' occupation remained freehold. The period between 1935 and 1942 saw further improvements in the index as a result of the promulgation of the Crown Land Ordinance, No.27 of 1938 (Amendment); The Kenya (Native Lands Trust) Ordinance, No.28 of 1938 (Amendment) which repealed the 1930 Ordinance; the Kenya (Highlands) Order in Council of 1939; the Kenya (Native Areas) Order in Council of 1939 and Farmers Assistance Ordinance No.18 of 1936. This set of legislation was meant to implement the Morris Carter Land Commission's recommendations of 1933. These laws strengthened the legal effect of the dual land policy as *White Highlands* were reserved for Europeans and *Native Reserves* for Africans.

In 1944, the British Government started a programme of settling ex-World War II soldiers in its colonies and it established the European Settlement Board to be responsible for this programme in Kenya, thereby marking the second European settlement in the country. This was followed by the adoption of the Chattels Transfer Ordinance, No.24 of 1930 and the passing of Land Control Ordinance, No.24, 1944 to provide for expropriation and alienation of unused land in European-owned land in Kenya Highlands. This increased uncertainty over freehold land rights is represented by a slight decline in our freehold index. However, Okoth-Ogendo et al. (2008) note that this uncertainty did not last for a long period.

The period between 1953 and 1963 was the last period for establishing legal infrastructure for freehold tenure in Kenya prior to independence. This period saw once again an improvement in the index which reflects the passage of the Swynnerton Plan of 1955 which supported individualization of tenure in the economy. The Plan led to enactment of a number of laws to support the land reforms recommended by the Plan. Among the laws enacted during this period were, the

Kenya Native Areas (Amendment) Order in Council, 1958; The Native Land Registration Ordinance, No.27 of 1959 (or the Land Registration Special Areas); the Land Consolidation Act of 1959, The Land Control (Native Lands), 1959; The Land Registration (special Areas) Ordinance, No.27 of 1959; the Land Order in Council of 1960[59]; Agricultural (Amendment) Ordinance, No.47 of 1960; The Kenya Land Ordinance of 1960; the Kenya Land Order in Council of 1960 (section 15); the Land Control (Special Areas) Regulations of 1961; the Development and use of Land (Planning) Regulations of 1961; the Government Lands Act of 1960. These laws largely strengthened tenure holding under freehold and supported land reforms meant to make way for individualization of land ownership.

Freehold property rights during the post-independence period

In 1965, the administration of land was placed in the hands of the president through the Constitution of Kenya (Amendment) Act No.14 of 1965. This was followed by the Land Control Act, No.34 of 1967 which became substantive law to control all transactions related to agricultural land in Kenya and repealed the land regulations of 1963 and all other laws that controlled land prior to 1967. In 1968, the Land Planning Act and the Land Acquisition Act were promulgated. The former Act provided that no land development could be undertaken without the consent of the Central Authority in areas where the Act applied. The latter provided for the compulsory acquisition of land for the benefit of public interest. This provision was also embodied in sections 75, 117 and 118 of the Constitution of Kenya (Amendment) Act No.28 of 1964 and the Constitution of Kenya (Amendment) Act No.14 of 1965. The compulsory acquisition of land further weakened freehold property rights as reflected in our index.

The period between 1978 and 1989 saw further decline in our index as a number of amendments of the post independence regime began to take their toll. The 1979 Constitution of Kenya (Amendment) Act, No.5 strengthened the compulsory acquisition of land by government. This was followed by the passing of the Magistrates Jurisdiction Amendment Act of 1981 which vested

[59] See Also the Conversion of lease Regulations, Legal Notice No.631 and the conversion of Lease rules, Legal Notice No.632 of 1960

in councils of elders the administration of land, adjudication and setting of boundaries on land and a Land Control Act of 1981 (Amendment) which established Land Control Board to further strengthen control of all transactions on land. This legislation resulted in erosion of freehold property rights which can be observed by a decline in our freehold property rights index.

Starting in 2001, our index improves reflecting the passing of the Constitution of Kenya, 2001 (Amendment) and the Land control (Amendment) regulations of 2001 which repealed some stringent regulations on land use and resuscitated protection of property rights under freehold ownership. This improvement continues until 2010. The improvement was also due to the creation of Kenya Land Policy in 2007 which governed land issues in a more holistic manner and the enactment of the New Constitution of Kenya in 2010 which reaffirms existing rights over land.

2.5 Political Instability Index

To complement our work on the measurement of *de-jure* institutional indicators, we compute *a de-facto* political instability index. It must be noted that this index is outcome based and it captures the notion of the occurrence of socio-political unrest in the economy. Our interest in computing political instability index comes from its claimed relationship with institutions, particularly political institutions. The literature on institutions claims that political instability could lead to an institutional transition like the one witnessed in the move from communism in the late 1980s and early 1990s, and which the Arab spring may yet deliver. This is because when the detached elite group which often places little weight on collective interests is faced with a threat of losing power, it becomes tempted to choose a path of reform by institutionalizing constraints on the power of the future incumbents (Besley et al., 2013). On the other hand, Aisen and Veiga (2010) argue that political instability is likely to shorten policy maker's planning horizons leading to sub-optimal short term macroeconomic policies. It may also lead to a more frequent switch of policies, creating volatility and thus negatively affecting macroeconomic performance. Barro, 2000 supports this argument and shows that politically unstable countries tend to grow more slowly than stable

ones. Dupas and Robinson (2012) identify two other causal channels through which instability affects growth: First, the uncertainty associated with political instability may discourage physical capital accumulation and investment. Second, violent civil conflict which results from political instability disrupts productive activities. We believe that provision of political instability index will help validate or refute some of these claims. Nevertheless, measurement of political instability remains a challenge. Evidence from the political science literature shows that political instability is a multidimensional phenomenon which cannot be captured by just one variable[60].

This literature however has not reached consensus as to the appropriate elements to include when measuring political instability. Our political instability index captures the following sub-components: *(1). Annual number of Political Fatalities, war related fatalities including genocides on general public* (x_1)*; (2). Annual number of politically motivated arrests* (x_2)*; (3). Annual number of political detentions* (x_3)*; (4). Annual number of political parties and publications banned* (x_4)*; (5). Number of declarations and renewals of state of emergency per year*(x_5)*; (6). Number of riots, strikes and demonstrations* (x_6)*; (7). Number of reported cases of politically-related property damages per year* (x_7).

2.5.1 Scaling and Rating of Political Instability Index

Our scaling and weighting criteria follows Zaaruka and Fedderke (2011b) and Gwenhamo et al. (2008). We however include other components which we believe are part of political instability. These include the number of reported cases on damaged property due to political violence, political uprisings and number of riots, strikes and demonstrations. The value on the range for each sub-component of the index in a year represents different values pertaining to an actual occurrence of an attribute captured by the sub-component. Since, the index is *de-facto* in nature, occurrences of some of the sub-components are disproportionate which necessitates standardization in scaling (see Table *2.2* in Appendix).The scaling is performed on a range from 0 to 30 points, where

[60](See Rummel and Tanter (1974),Tanter (1966), Feierabend and Feierabend (1966),Morrison and Stevenson (1971) and Habib and Zurawicki (2002))

30 represents the most unstable economy characterized by *conflict, political fatalities, genocides on general public, politically motivated arrests, political detentions, banning of publications and political parties, state of emergency, riots, strikes and demonstrations* and 0 represents a complete absence of instability. The overall index in the case of political instability is composed of sub-components which are given different weights depending on their relative importance in an index as well[61]. In constructing each index, the sub-components each which has the highest score of 5 points after normalization, are then summed up to give the overall status of the status of the index across time. The choice of weights were based on an earlier paper by Zaaruka and Fedderke (2011b) that had used factor analysis in choosing appropriate weights for the political instability index. However we aknowledge a caveat that the political instability index has actually summed up too many issues some of which are more important than others and those that result from our inability to gather all defacto data to be used in the development of this composite indicator.

2.5.2 Political Instability during the Pre-Independence Era

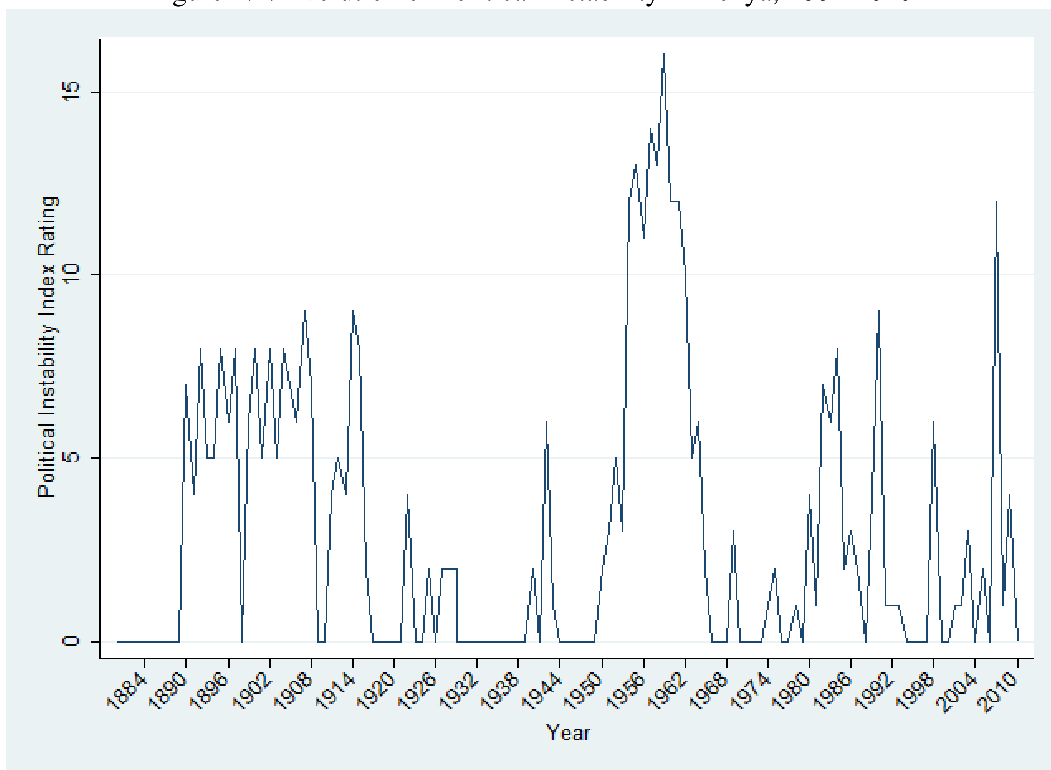
Political instability has played out in different forms throughout Kenya's history. During the colonial period, instability often took the form of violent attacks to expropriate land, assassinations, politically motivated arrests and detentions. Figure 2.4 plots an instability index for Kenya over the period 1880 to 2010. The index shows that the country experienced several episodes of political and social instability since the British invasion of 1888. The British invasion met with fierce anti-colonial resistance from the indigenous population which resulted in a number of battles.[62] These battles resulted in a number of casualties which reflects as increased instability in the economy. By 1915, the settlers demands for labour had drastically increased and the colonial state enacted laws that acted as instruments of forced labour and applied violent means to enforce their labour policy. However, when natives resisted such laws and the colonial rule in general, further battles were fought which further increased instability in the protectorate. The fight between the

[61] see Table2.2 for weights of sub-components.

[62] Note that these battles were fought between different tribes in the country since Kenya was not yet a unified country.

Giriama and British colonialists provides a good illustration of such resistance. The Giriama people refused to be coerced into the colonial scheme of development and to be made a workforce of British capitalist (settlers). They refused to pay taxes, to work as colonial porters or be turned into mercenaries in the imperialist army or to work on settlers plantations. The British responded by using armed forces, thus killing many civilians (Kinyatti, 2008). This early anti-colonial warfare led to a loss of a number of lives, and property among the indigenous population.

Figure 2.4: Evolution of Political Instability in Kenya, 1884-2010



Between 1920 and 1945, was a period of stability. The formation of the anti-imperialists movements such as the African political organizations, trade union movements and other anti-colonial movements intensified but such movements held back their resistance until the late 1940s.In 1952, a key watershed revolt erupted led by the Mau-Mau group. The Mau-Mau uprising escalated instability in the economy until 1963. The period was characterized by armed revolutionary movements, guerrilla warfare, political detentions, death sentences, armed attacks and a number of

massacres and genocides such as Hola Massacre[63] and Lari Massacre[64]).

2.5.3 Political Instability during the Post-Independence Era

During the first republican government (1963-1978) under Kenyatta's administration, Kenya continued to experience instability. A number of political assassinations of prominent political leaders such as Pio Gama Pinto, Tom Mboya, John M Kariuki, Ronand Ngala, and Arwings Kodhek occurred and these threatened the stability of the country. During the same period, the instability was also compounded by political demonstrations and violence as a result of the expulsion of some members of legislature who broke away from the ruling political party-KANU and formed an opposition party- the Kenya Peoples Union (KPU). These public demonstrations saw civilians killed by the security forces. .

Political instability further intensified during the Moi administration (1978-2002). During that era, public demonstrations; pre-election and post election violence; detentions without arrest; assassinations; massacres and uprisings against the one party state intensified. This was a period of general lack of respect of the rights of citizens by the state as the president exercised his powers under one party state to detain and harass any person who opposed his authoritarian rule. The exercise of this power, provided for under the Public Order and Public Security Law became evident after an attempted military coup in 1982. For instance, a number of lecturers, students, and ordinary citizens were detained for opposing government policies. Thousands of innocent civilians were killed in the Wagalla Massacre[65] and the Saba Saba (7:7) uprising for a return to multi party democracy. Public gatherings were banned, and the political turmoil continued until 1990 (Wanjala and Kibwana, 1997). It was during this period that John Robert Ouko was assassinated.

[63]The Hola Massacre took place in Hola detention camp and more than 1158 prisoners were beaten to deathElkins (2005).

[64]The Lari Massacre took place at the Lari District and a thousands of civilians (estimated at more than 5,000) were killed by the British police forcesAnderson (2005, see).

[65]More than 5000 people of the Somalia Kenyans were brutally killed by Government armed forces.

With mounting pressure from the Donor community and continued protests in the 1990s, the country returned to multiparty democracy. However, instability continued as the 1992 and 1997 elections saw outbreaks of attacks and election violence over contested election results. These contested elections left hundreds of people dead or injured, and thousands of others displaced from their homes (Lunn et al. 1998). Between 1998 and 2002, the economy experienced relative stability. In 2007, political instability resurfaced due to post election violence that erupted following the 2007 contested presidential elections. The 2007 post election violent protests left more than 1,000 people dead and many more citizens injured and more than 3,000 women raped and property damaged while at least 350 000 were internally displaced (Republic of Kenya, 2008)). The 2007 post election crises demonstrated the fragility of Kenya's political stability and raised questions about the strength of institutions in ensuring peaceful political transition.

The sporadic yet recurrent episodes of social unrest, civil conflicts, detentions, and violent protests that often transformed into ethnic clashes and inter-community conflicts have been blamed on the "divide and rule" strategy inherited from the British rule. These have also been ascribed to contested property rights and the skewed post-independence land redistribution (Wakhungu et al., 2008). Post colonial instability frequently resulted from political patronage systems, and increasing horizontal inequality[66], as well as deprivation of the population of essential services and repression of political opposition (Wakhungu et al., 2008). The implications of these sporadic yet recurrent episodes of political instability in Kenya from 1800 years ago, on households and social economic development in general, remain unexplored.

2.6 Comparison of Institutional Indices

2.6.1 Correlation between our indices and widely used institutional indices

Bollen (1990) argues that testing for the correlation between newly constructed indices that capture diffuse concepts such as political and property rights, and indices widely used in the literature

[66]This is defined as inequality between social, political or ethnic groups

is essential in establishing their reliability. We therefore compute the Spear-man correlation coefficients to investigate the extent to which our measures of *(i)* Property Rights (Freehold and Non-Freehold), *and (ii)* Political Rights and Civil Liberties (PrCL) correlate with the Heritage Foundation Property Rights index, the Freedom House indices for Political Rights and Civil Liberties, and the Polity IV index of political rights and civil liberties. It must however be noted that the Kenya index is build up from a careful examination of the central institutional changes and the subsequent events that occurred in the country, following a much different methodology than those of the other indices. Ex-ante it was not clear that different indices would be correlated. Second, our index is transparent about the events that drive it, making interpretation of subsequent analysis much more clear. For instance, the passing of the Swynnerton Plan of 1955 which supported individualization of tenure in the economy, the Kenya Native Areas (Amendment) Order in Council, 1958; The Native Land Registration Ordinance, No.27 of 1959 (or the Land Registration Special Areas); the Land Consolidation Act of 1959, led to an improvement in the freehold property rights index from a score of 71 observed in 1950 to a score of 83 observed in 1960. Table 2.1 presents the correlation results.

Despite the criticisms levied against the conventional measures of institutional indicators, our results surprisingly show high correlation with such indicators for the time span for which they are available. Indeed such high correlations could be regarded as a validation of such indicators. These correlations also point towards efficacy of our newly constructed institutional indicators based on durable qualities of institutions. Nonetheless, in terms of time coverage, these conventional indexes remain inadequate and fail to be used to unravel issues of persistence of institutions which require the use of dataset with a long time span.

The results show significant correlation of 63 percent and 77 percent between our political and civil liberties indicators and the political rights and civil liberties from Freedom House. The correlation between these and Freedom House indices is also significant and positive, which supports the view that civil liberties and political rights are mutually reinforcing and, to a certain extent, indivisible. This provides justification for inseparability of civil liberties from political rights in

our newly constructed indicators. Our political and civil liberties index also correlates well with the Polity IV index with a significant correlation coefficient of 74 percent. Turning to the property rights index, the freehold index correlates well with the Heritage Foundation Property Rights Index with a correlation coefficient of 81 percent. Our property rights indices are also highly correlated with each other. The correlation between freehold property rights and non-freehold property rights is positive and strong while that between political rights and civil liberties and freehold property rights is also positive but less than the correlation with non freehold property rights.

The high correlations achieved in this study point towards some verification of the conventional indicators especially for Kenya for the period in which such indicators were computed. However, this research does not claim that the criticisms levied against the widely used indicators are invalid as that will require computing indicators for other countries. What the correlations really imply in this context, is simply that there is some efficacy in our newly constructed indicators.

The foregoing argument notwithstanding, the correlation between the property rights indicators and the political rights and civil liberties measures supports the arguments raised in literature that the two sets of indicators are not mutually exclusive. Improvement in political rights and civil liberties has implications for protection of non-freehold property rights in this economy. The negative correlations between some rights indicators and political and civil liberties are also noted. Such negative correlations imply that during the period under review, the two rights moved in opposite directions. This is plausible given that during that period political rights of citizens were not respected, and the government continued to promote a freehold system of land holdings at the cost of non-freehold tenure.

Table 2.1: Correlations between Institutional Indicators

Correlation	Non-Freehold	Freehold	PrCL	Instability	Property Rights (HF)	Political Rights (FH)	Civil Liberties (FH)	Polity *IV*
Non-Freehold (Authors)	1.0							
Freehold (Authors)	0.929***	1.0						
	(0.000)	...						
PrCL (Authors)	0.835***	0.682***	1.0					
	(0.000)	(0.000)	...					
Instability (Authors)	-0.085	0.039	-0.349**	1.0				
	(0.565)	0.789	(0.0313)	...				
Property Rights (HF)	-0.797***	0.815***	-0.644***	-0.321	1.0			
	(0.000)	(0.000)	(0.007)	(0.224)	...			
Political Rights (FH)	0.676***	0.584***	0.633***	0.065	-0.392	1.0		
	(0.000)	(0.000)	(0.000)	(0.699)	(0.133)	...		
Civil Liberties (FH)	0.826***	0.720***	0.766***	-0.04	-0.522**	0.832***	1.0	
	(0.000)	(0.000)	(0.000)	(0.981)	(0.038)	(0.000)	...	
Polity *IV*	0.395***	-0.198	0.739***	-0.146	-0.524**	0.459***	0.479	1.0
	(0.005)	(0.176)	(0.000)	(0.321)	(0.037)	(0.004	(0.002)	...

***p<1%, **p<5% and *p<10%; P-Value in parenthesis;Variables are as defined in Table 2.7 and Instability refers to political instability

Period: 1960-2010 except for Property Rights (HF) which covers 1995-2010 and Civil Liberties (FH) which covers 1973-2010.

PrCL stands for Political Rights and Civil Liberties computed by the Authors. HF stands for Heritage Foundation while FH stands for Freedom House.

2.7 Conclusion

This chapter presented a new set of *de-jure* institutional indicators for Kenya for the period 1880 to 2010[67]. It discussed the evolution of these institutions over time. The motivation for the construction of the new indicators is the criticisms levied against the existing conventional institutional measures, in particular the criticism that they do not capture permanent characteristic of institutions, as implied in the works of Douglas North. It addressed this weakness by using laws that govern immovable property in Kenya for the period under consideration. The indicators presented cover a longer time horizon which provides an opportunity to analyze in a Time Series context, the dynamics of economic growth and development. From the discussion on the evolution of institutions in Kenya, three important points are worthy of note. First, the existing property rights institutions in Kenya were largely shaped by the legal framework introduced since 1885 when Kenya was declared a British protectorate. Under British rule—protectorate period (1885-1920) and colonial period (1920-1963)—an extensive legal apparatus designed to expropriate much of the land and redistribute it to the white settlers—at the expense of the indigenous populations—was enacted. These laws introduced and promoted the freehold property rights system for the benefit of the settlers while undermining pre-existing non-freehold systems which were based on indigenous customary laws. Thus, Africans were often displaced to make way for Europeans and had to settle in marginal areas known as "native reserves". However, even their rights to land usage in those native reserves were squarely limited by the discretionary powers of the Governor. This policy of land grabbing was the origin of many grievances about resources between the Natives and the settlers which the government attempted to quell with little success. The Natives' mobilization and agitation over the injustices of land expropriations culminated in the Mau-Mau revolt in the early 1950s. In response to the revolt, the British colonial office enacted laws that promoted free tenure holdings (individualization of tenure) in the native reserves. It also created settlement schemes both to diffuse tension and ensure that the colonial

[67]Note that the new set of institutional indicators constructed in this paper correlate well with existing indicators. This points towards efficacy of these newly constructed institutional indicators based on durable qualities of institutions. These can perhaps counter criticisms of conventional institutional indicators.

land-holding structure could be preserved more or less intact After 1963, the newly independent Kenya made little effort to fundamentally change the colonial laws that governed land rights. The situation deteriorated further as the executive—under Kenyatta and then under Moi—exercised unchecked powers over land matters and control over any resource in the economy. It was not until the advent of democracy in 1992 that some of the most restrictive laws were repealed. During the third regime of the post independence period under the political administration of president Kibaki, some notable improvements were made in legislation to protect the property rights of people. Despite these improvements in the legal framework, the problem of land allocation has not been addressed and remains one of the sources of conflict over resources in this economy.

The foregoing discussions have shown that amendments to legislation carried out in Kenya between 1982 and 1990 were intended to concentrate power in the Executive, undermine the functioning of the other arms of the government and independent offices and entrench an undemocratic and authoritarian system of government. The system of checks and balances envisaged in the Independence Constitution was clearly weakened. The creation of a one party state was intended to stifle dissenting voices in Parliament. The judiciary was subjugated through removal of the security of tenure provisions for the judges of the High Court and the Court of Appeal. The assault on freedom and political rights under Moi's presidency turned Kenya into an authoritarian country, and that this led to agitation for reforms which were headlined by agitation for the introduction of a multiparty state. Politicians who had been excluded from mainstream politics through expulsion from KANU or by being rigged out during the infamous queue voting elections of 1988 joined the international community and religious leaders to exert considerable pressure for political reforms. This chapter argued that despite these pressures, political leaders and their interest groups opposed the constitutional reforms by all means including force, since such reforms went against their interests. The delay in such reforms led to the breakdown of governance in Kenya. Such breakdown which inevitably led to the post-election crisis of 2007. This post-election crisis expedited the emergence of the new constitution which reaffirms the political and civil rights of all Kenyans.

APPENDIX TO CHAPTER 2

APPENDIX A1

Figure 2.5: Sub-components of non-freehold property rights for Kenya, 1884-2010 (A)

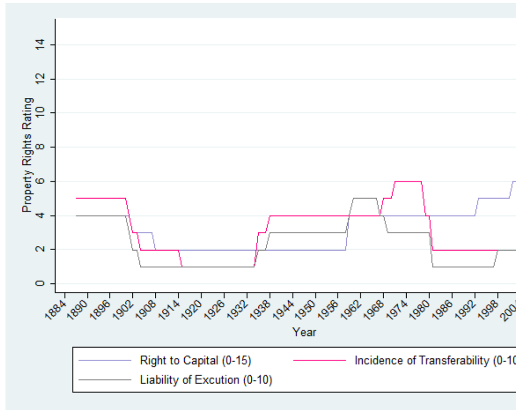


Figure 2.6: Sub-components of non-freehold property rights for Kenya, 1884-2010 (B)

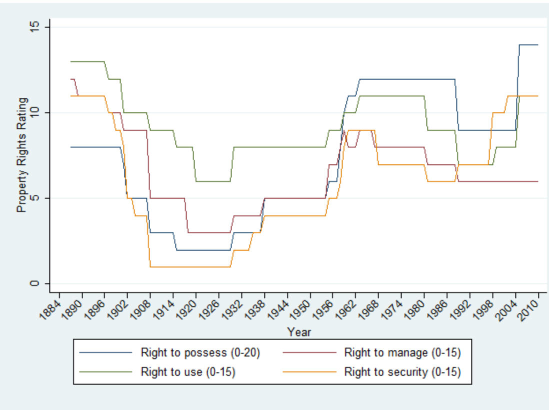


Figure 2.7: Sub-components of freehold property rights for Kenya, 1884-2010 (A)

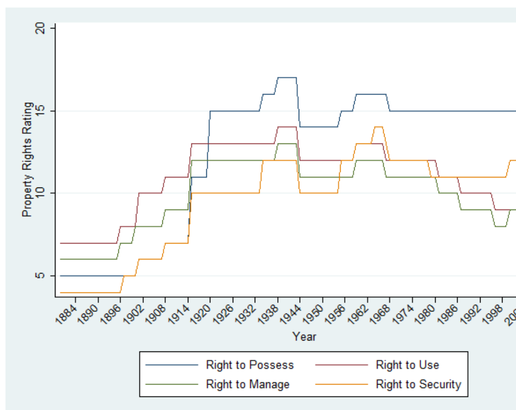


Figure 2.8: Sub-components of freehold property rights for Kenya, 1884-2010 (B)

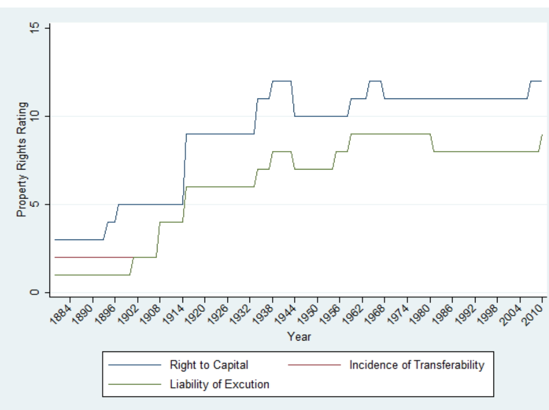


Figure 2.9: Sub-components of political rights and civil for Kenya, 1884-2010

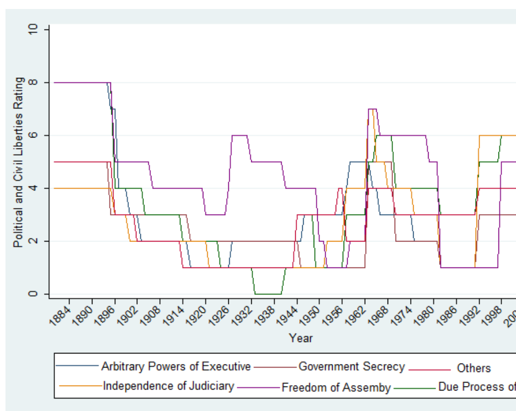
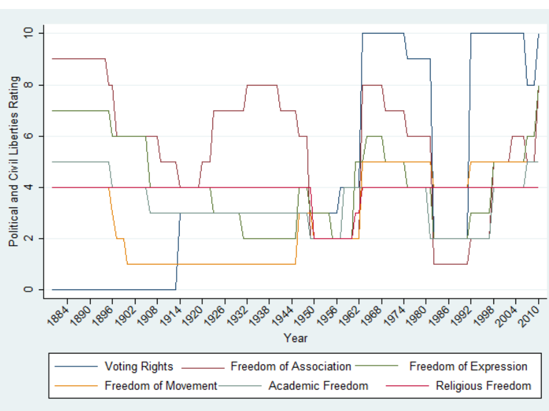


Figure 2.10: Sub-components of political rights and civil liberties for Kenya, 1884-2010



APPENDIX TO CHAPTER 2

APPENDIX A2

DETAILED METHODOLOGY ON THE COMPUTATION OF INSTITUTIONAL INDICES

Table 2.2: Scaling Matrix for the Political Instability Index

Sub-components	*Scaling Criteria*				
1. Annual number of Political Fatalities, war related fatalities					
including genocides on general public (x_1)	$0 < x_1 \leq 100$	$100 < x_1 \leq 1000$	$1000 < x_1 \leq 5000$	$5000 < x_1 \leq 10000$	$x_1 > 10000$
Scale	1	2	3	4	5
2. Annual number of politically motivated arrest (x_2)	$0 < x_2 \leq 10$	$10 < x_2 \leq 25$	$25 < x_2 \leq 50$	$50 < x_2 \leq 100$	$x_2 > 100$
Scale	1	2	3	4	5
3. Annual number of political detentions (x_3)	$0 < x_3 \leq 100$	$100 < x_3 \leq 1000$	$1000 < x_3 \leq 5000$	$5000 < x_3 \leq 10000$	$x_3 > 10000$
Scale	1	2	3	4	5
4. Annual number of political parties and publications banned (x_4)	$0 < x_4 \leq 10$	$10 < x_4 \leq 20$	$20 < x_4 \leq 30$	$30 < x_4 \leq 40$	$x_4 > 40$
Scale	1	2	3	4	5
5. Number of declarations and renewals of state of emergency per year (x_5)	$0 < x_5 \leq 2$	$2 < x_5 \leq 4$	$4 < x_5 \leq 6$	$6 < x_5 \leq 8$	$x_5 > 8$
Scale	1	2	3	4	5
6. Number of township riots and strikes and demonstrations (x_6)	$0 < x_6 \leq 10$	$10 < x_6 \leq 25$	$25 < x_6 \leq 50$	$50 < x_6 \leq 100$	$x_6 > 100$
Scale	1	2	3	4	5
7. Number of reported cases of politically-related property damages per year (x_7)	$0 < x_7 \leq 100$	$100 < x_7 \leq 1000$	$1000 < x_7 \leq 5000$	$5000 < x_7 \leq 10000$	$x_7 > 10000$
Scale	1	2	3	4	5

Authors' breakdown following Zakura (2011) with modified scaling.

Table 2.3: Definition of the Main Variables

	Institutional Indicators	
Variable	Definition	Source
PrCL	Political rights and civil liberties	Computed from this study
FhPR	Freehold property rights	Computed from this study
NFhPR	Non-Freehold Property rights	Computed from this study
PoI	Political Instability	Computed from this study
PRFH	Political rights from Freedom House	Freedom House: www.freedomhouse.org
CLHouse	Civil liberties from Freedom House	Freedom House: www.freedomhouse.org
HFPR	Heritage Foundation Property Rights	Heritage Foundation:www.heritage.org

KA stands for Kenya Archives and BL stands for Barro and Lee education statistics

Table 2.4: **Scoring of Freehold and Non-freehold Property Rights Index**

FhPR and NFhPR Index		**Legislation governing property rights**	**Scoring Guide**
Sub-components	Weights	Examples	
Right to Possess (RTP)	(0-20)	The Land Control (Native Land) 1959;	Complete possession of property guaranteed in Law = 20
		The land Order in Council of 1960;	No possession = 0
		The Land Control Act (no.34) 1967;	Possession with restrictions = 5-15 (depending on number of restrictions)
Right to Use (RTU)	(0-15)	The land (Group Representative) Act, 1986;	Freedom to use property = 15
		The Land Acquisition Act, 1986;	No freedom to use = 0
		The Land Control Regulations, 1970;	Freedom to use with restrictions = 5-10 (depending on number of restrictions)
Right to Manage (RTM)	(0-15)	The Kenya Land (Amendment) Act, 1964;	Complete freedom to use manage = 15
			No freedom to manage = 0
			Freedom to manage with restrictions = 5-10 (depending on number of restrictions)
Right To Capital (RTC)	(0-15)		Complete right to capital = 15
			No right to capital = 0
			Right to capital with restrictions = 5-10 (depending on number of restrictions)
Right to Security (RTSY)	(0-15)		Complete right to security = 15
			No right to security = 0
			Security with restrictions = 5-10 (depending on number of restrictions)
Incidence of Transmissibility (IoT)	(0-10)		Freedom to use property = 15
			No freedom to use = 0
			Freedom with restrictions = 5-10 (depending on number of restrictions)
Liability to Execution (LTE)	(0-10)		Liability to execution = 15
			No liability to execution = 0
			Liability to execution with restrictions = 5-10 (depending on number of restrictions)
Total Score	(0-100)		

Table 2.5: **Scoring of Political Rights and Civil Liberties (PRCL) Index**

PRCL Index		**Legislation governing property rights**	**Scoring Guide**
Sub-components	Weights	Examples	
Voting rights/franchise	(0-10)	The Lennox-Boyd Constitution of 1957	Legal framework guaranteed voting rights = 10
		The Independence Constitution of Kenya of 1963	No voting right = 0
		The Lyttleton Constitution of Kenya of 1957	Legal framework provides for voting with restrictions = 5-8
Freedom of Association	(0-10)	The Preservation of Public Security Act, No.189 of 1966	Legal framework guaranteed freedom of association = 10
			It does not allow freedom of association = 0
		The Constitution of Kenya (Amendment) Act, No.40 of 1966	Legal framework allows freedom of association with restrictions = 5-8
Freedom of Assembly	(0-10)		Legal framework guaranteed freedom of Assembly = 10
		The Constitution of Kenya (Amendment) Act, No.16 of 1968	It does not allow freedom of Assembly = 0
			Legal framework allows freedom of assembly with restrictions = 5-8
Extent of Arbitrary Power	(0-10)	The Constitution of Kenya (Amendment) Act, No.7 of 1982	Legal framework gives arbitrary powers to executive= 0
			It does not provide for arbitrary power of the executive= 10
			Legal framework allows for abitrary power of executive with restrictions = 5-8
Independence of Judiciary & Legislature	(0-10)	The Constitution of Kenya (Amendment) Act, No.4 of 1988	Legal framework guaranteed independence of judiciary & legislature = 10
		The Constitution of Kenya (Amendment) Act of 2004	Legal framework does not guarantee independence of judiciary & legislature = 0
			Legal framework guarantees independence of judiciary & legislature with restrictions = 5-8
Government Secrecy	(0-10)	The Constitution of Kenya (Amendment) Act of 2008	Legal framework allows government secrecy = 0
		The Preservation of Security (Amendment) Bill of 1994	No government secrecy =10
		The Elections Offences Act of 1998	Legal framework allows government secrecy with restrictions = 5-8
Due process of law	(0-5)	The Peaceful Assembly Bill of 1998	Legal framework allows for due process of law = 5
		The Political Parties Act of 2002	Legal framework does not allow for due process of law = 0
		The Societies Act (Amendment) of 2002	Legal framework allows due process of law with restrictions = 2-4
Academic Freedom	(0-5)	The Indemnity Repeal Act of 1968	Legal framework guaranteed academic freedom = 5
		The Indemnity (Repeal) Act of 2010	Legal framework does not guarantee academic freedom = 0
		The Official Secrets Act (Repeal) of 2009	Legal framework guarantee academic freedom with restrictions = 2-4
Freedom of Movement	(0-5)	The Chiefs Authority Act of 1994	Legal framework guaranteed freedom of movement = 5
		The Public Order Bill of 1994	Legal framework does not guarantee freedom of movement = 0
			Legal framework allows guarantee freedom of movement = 2-4
Religious Freedom	(0-5)		Legal framework allows for freedom of Religious = 5
			Legal framework allows for freedom of Religious = 0
			Legal framework allows voting with restrictions = 5-8
Others	(0-5)		Legal framework guaranteed other rights such as labour rights= 5
			Legal framework does not guarantee other rights such as labour rights = 0
			Legal framework guarantees other rights such as labour rights with restrictions = 2-4
Total Score			

Chapter 3

Persistence of Institutions and Causality between Institutions and Economic Development in Kenya

"Once a set of institutions comes to dominate society it tends to persist for long periods of time though the institutional path can certainly change in the context of major critical junctures."

– James A. Robinson (2010: page 2)

3.1 Introduction

THE literature on institutions and economic development has advanced three main propositions. First, that institutions that were established by the European imperial powers in their colonies during the colonial era have shaped the current state of institutions in these former colonies. Second, that such institutions have had lasting effects on these countries' economic development even though these countries attained their independence from the European colonial

powers several decades ago (Acemoglu and Robinson, 2008, 2006). Third, that political institutions in particular, are the main cause of these countries' developmental problems(Acemoglu and Robinson, 2012).

The first proposition also dubbed "the persistence of institutions hypothesis [1]" is understood in this context to refer to the possibility that the effects of institutions may persist over long time-spans even after those specific institutions have long been changed or evolved in some way [2]. In Robinson (2010)'s parlance the argument goes like: "Once a set of institutions comes to dominate a society it tends to persist for long periods of time though the institutional path can certainly change in the context of major critical junctures". This proposition finds its basis in the seminal works of Acemoglu et al. (2001); Engerman and Sokoloff (2000). According to these authors, Europeans colonizers established institutions that were not conducive to investment and development (they were extractive, in their terminology) in places where they could not settle because they faced high mortality rates. Such extractive institutions did not foster the process of economic development and have persisted to the present-day, and continue to stifle the process of economic development of these former colonies. While in countries where colonizers settled because they faced less settler mortality rates, they created durable institutions that were conducive to private investment and promoted economic development. Notwithstanding its general acceptance, this proposition has neither been empirically tested, nor discussed from a historical perspective in the context of these former colonies, in particular in Africa[3].

The assumption of institutional persistence has also given rise to a number of other important research questions that have remained outstanding in the institutions-development discourse as emphasized by Acemoglu and Robinson (2008). For instance, why are some rules persistent while others are not? Why do some political leaders create and strengthen institutions that promote

[1]This claim has served as the basis on which the proof of the primacy of institutions over other determinants of economic development is based (Acemoglu and Robinson, 2006, 2008).

[2] (see Acemoglu and Robinson, 2008, 2006; Robinson, 2010; North, 1993, 1990; North et al., 1971) for theoretical view on institutional persistence

[3]The only paper that has attempted to provide evidence from both historical and econometric perspectives, in support of institutional persistence is Acemoglu et al. (2001) using Gurr's historical data on political institutions. La Porta et al. (1998); **?** only attempt to provide such evidence from a historical perspective. However the paper also investigated the developed countries.

long-run economic development, such as security of property rights while others neglect such institutions or destroy those that already exist? The current development discourse has been grappling with these questions, especially for developing countries.

The second claim is that institutions have stifled the process of economic development of the former colonies.This claim suggests that there is causality running from institutions to economic development in these countries. This claim has remained controversial in the literature. The controversy arises with regard to whether causality is uni-directional or bi-directional. One view from the literature asserts that it is institutions that drive the process of economic development. According to the proponents of this view, political institutions such as democracy and other checks on government are the main mechanisms for securing property rights that eventually stimulate investment in human and physical capital, and therefore economic growth and development. They assert that differences in economic performance of countries around the world today are due to colonial rules that created completely different institutional development trajectories, Acemoglu et al. (2001) view institutional development as a causal mechanism through which colonial institutions influences economic development[4]. The burgeoning empirical works that support this view often assume uni-directional causality. That is, they assert that causality runs from institutions to economic development, ignoring the possibility that economic development could change institutions. A contrasting view in the literature following the seminal works of Lipset (1959)[5] argues that it is development that leads to better institutions (Chang, 2011, 2006)[6]. According to this line of argument, a minimum threshold level of economic development and human capital is the basic requirement necessary to sustain democratic institutions and economic institutions. The proponents of this line of thinking further posit that such a minimum threshold could even be acquired through policies pursued by dictators (Glaeser et al., 2004; Djankov et al., 2003).

The last proposition closely relates to the first two and emanates from the recent compelling work

[4]see alsoEngerman and Sokoloff (2000); Glaeser et al. (2004)

[5]Lipset (1959) advanced the hypothesis that became famously known as the Lipset hypothesis.

[6]However Chang (2011) notes that the paper by Acemoglu et al. (2001) is a partial exception in the sense that it recognizes the two way nature of the relationship at a theoretical level although it goes on to conclude through the use of instrumental variable that empirically the causality runs from institutions to development.

of Acemoglu and Robinson (2012)[7]. It argues specifically that where inclusive political institutions were established, they influenced inclusive economic institutions, that in turn affected the long-term economic development and prosperity of the former colonies. Conversely, where extractive political institutions were established, they gave rise to extractive economic institutions, that led to economic failure of the former colonies. On the empirical front, this proposition suggests some kind of causality running from political institutions to economic institutions, yet it has not been empirically tested in the institution-development literature[8]. In Acemoglu and Robinson (2012, 2008, 2006)s' view, political institutions such as democracy and other checks on government are the main mechanisms for securing property rights that eventually stimulate investment in human and physical capital, and therefore stimulate economic growth and development.

Despite their wide acceptance in the institutions and development literature, there is a paucity of empirical tests that examine the first two of these propositions. Only the third claim has received some attention. However such work has concentrated on developed countries using cross country analyses and a panel of countries. The cross country and panel studies tend to generalize the causal relationship between institutions and economic development across countries (Przeworski, 2004). The problem of such generalization is that by grouping countries that are at different stages of institutional development and economic development, one fails to address country specific effects of institutions on economic development. The methods applied in such analyses fail to address the potential biases induced by the existence of cross country heterogeneity, which, if not accounted for, may lead to inconsistent and misleading conclusions. Brock and Durlauf (2001) note that the assumption of parameter homogeneity in panel estimates that describe the effects of institutions on economic development across countries is not plausible (see also Durlauf, 2000; Evans, 1998). For instance it is difficult to justify that a change in the level of civil liberties has the same effect on economic development in the United States as in Kenya. Chang (2011) contends that the relationship between institutions and development is almost certain to differ

[7] Although it is Acemoglu and Robinson (2012) who popularized this proposition, the seminal works of North (1993, page 13) had already noted that political institutions influence economic institutions.He postulated that economic institutions (property rights) are specified and enforced by polities, and that without an in-depth understanding of the way polities evolve it is not possible to understand the way property rights evolve.

[8] To the best of our knowledge, no other study empirically tests this claim

across countries. He therefore suggests that "Time Series evidence may offer better insights than can cross-section studies, which lump every country from Swaziland to Switzerland do"[9].

It is against this backdrop that this chapter examines three related fundamental propositions that emanate from the institutions-development discourse from a Time Series perspective for one African country-Kenya. The research provides the empirical evidence for a number of claims about Kenya's lack of economic development. The specific set of questions addressed are: (a) Is there evidence of persistence of institutions in Kenya[10]?; (b) Do political institutions cause economic institutions?; (c) What is the direction of causality between institutions and economic development in Kenya?

Kenya is selected for this study because it is one of the colonies in Africa where the British colonialists settled and therefore becomes a natural laboratory to test these propositions. If the argument developed by Acemoglu et al. (2001) that where imperial colonialists settled they created inclusive institutions is valid, then Kenya should have been endowed with robust and growth-enhancing institutions. Yet Kenya has suffered from lack of economic development. This is evidenced by its poor socio-economic performance with real GDP per capita income estimated at US$882, an estimated 50% of the population living below the poverty line and life-expectancy at birth reaching 54.5 years (United Nations Development Programme, 2010). All these socio-economic indicators place it among the poor countries with low human development indexes. The country has also experienced recurring social, ethnic, political and economic conflicts over land resources, and grapples with increasing inequality. It also has high corruption levels sustained by an entrenched system of political patronage. Some scholars have argued that Kenya's development problem cannot be divorced from its institutional history as reflected in the quote below[11]:

"...In many ways, these factors are inherently linked to the colonial inheritance, ...the

[9] See Chang (2011; page 483)

[10] Empirical evidence in support of this assumption does not exist in the literature for developing countries. This study makes the first attempt to test rigorously such an assumption

[11] see also Hornsby (2013)

*disappointing record of economic development cannot be divorced from its historical context. Thus, the impact of the colonial legacy on the path of development that would be embarked upon cannot be neglected "*Fahnbulleh (2006, p.5).

This chapter contributes to the institutions-development literature by first testing empirically the assumption that institutions are persistent-"The Persistence of Institutions Hypothesis". The results from this test provide an empirical validation of this assumption. They show that both economic institutions (property rights) and political institutions (political rights and civil liberties) in Kenya have persisted from the colonial era to the present day (1885-2010). A second contribution to the literature is an assessment of the direction of causality between institutions and economic development for Kenya over the post independence period (1960-2010)[12]. A third contribution to the same literature is a test of the interdependence and causality between institutions, in particular the hypothesis by Acemoglu and Robinson (2012) that political institutions determine economic institutions. This proposition is here called " Political vs. Economic Institutions hypothesis".

3.2 Theory

3.2.1 Persistence of Institutions Hypothesis

As highlighted in the introduction, the institutions-development literature claims that institutions persist although they change. The central question that emanates from this claim is why do institutions persist? North and Thomas (1973b) in their first attempt to respond to this question, assert that persistence of institutions may be due to path dependence, the transaction costs of changing them, inertia built into culture, and the slow change of beliefs and ideologies. Acemoglu et al. (2001) build on this first intellectual insight and provide three further possible reasons why institutions may persist. First, they argue that this may be due to the sunk cost of establishment of

[12]Only the post colonial period is examined for this test due to the paucity of macroeconomic data that dates back to the colonial period

institutions and the transactions costs of enforcement. In this spirit, the setup of institutions (such as private property rights which place restrictions on government power and respect of private property) is usually costly since it requires the formation of a sizable bureaucracy and sacrifices while the reputation of these institutions is being built. Therefore once these costs have been born by the previous elites, it may not be beneficial for the current elites to switch from this set of institutions to extractive institutions per-se. In contrast, when the current elites inherit extractive institutions, they may not want to incur the costs of setting up the institutions that would constrain them, instead they would prefer to exploit the existing institutions for their own gains.

Second, and in support of Bates (1981), their persistence may be due to the investment incentives (or the lack thereof) of the elites that come to power and their size. Accordingly, if the ruling elites are few, each would have a larger share of the resources of the country hence the continuity of the extractive institutions. In contrast, if there are investment opportunities for such elites, they would opt for institutions that protect private property. At the same time if political elites that come to power do not possess comparative advantage in investment activities, then they would be less willing to enforce private property institutions. This point is consistent with the historical evidence from a number of African countries that shows that after these countries attained independence, the ruling political elites who were never involved in productive activities during the colonial rule favoured extractive institutions (Acemoglu et al., 2001).Third, such persistence may result because the ruling elites have made irreversible investment and would therefore support institutions that protect private property.

The assumption that institutions are persistent is based largely on informal institutions[13] (North, 2008;North, 1990). However many institutionalists such as Greif (2006) argue that formal institutions persist when they are consistent with and supported by informal norms, and that the most durable institutions are norms. Greif (2006) argue that institutions persist when they are internalized that they are self-enforcing. Therefore the central question is the role of informal institutions vs. formal institutions in the institution persistence debates, and what interaction exists between

[13]The informal institutions in our context are defined as socially shared rules, usually unwritten, that are created, communicated, and enforced outside of officially sanctioned channels (Brinks, 2002; Taylor, 1992)

formal and informal institutions within the persistence of institutions literature such that one can infer persistence from legal institutions ? First it must be recalled that social and political actors respond to the mix of “formal and informal constraints” . Recent studies suggest that informal institutions such as clientelism, patriamonialism, and ethnic politics-all of which were common place in Kenya, at times reinforce formal institutions (see Lauth (2000); Taylor (1992)).

Helmke and Levitsky (2004) develops a typology of four basic patterns of formal-informal institutions interaction: Complementary, accommodating, competing, and constitutive. These authors argue that complementary informal institutions coexist with formal institutions such that actors expect that the rules that exist on paper will in fact be enforced. These type of institutions generally “fill in the gap” left by formal institutions and address the problems or contingencies that are not explicitly dealt with in the formal rules. Accordingly, the accommodating informal institutions are defined as the “second best” strategy for actors who dislike outcomes generated by the formal rules but are unable to change or openly break these rules. These type of informal institutions at times enhance the stability or sustainability of formal institutions by dampening demands for change. These authors define competing informal institutions as those that structure actors incentives in ways that are incompatible with the formal rules: to follow one rule, actors must violate another. Examples of these institutions include clientelism, patriamonialism, clan/ethnic politics and other perticularistic institutions (O’Donnell, 1996). In the context of Kenya as argued elsewhere in the thesis, the formal institutions were reinforced by informal institutions in particular the competing and accommodating institutions. The informal institutions (i.e. ethnic politics) permitted sustenance of formal institutions that were largely shaped along clientelism and patriamonialism. The abuse of state machinery and wide spread vote fraud pursued through formal institutions was backed up by political players knowledge that they had majority vote from their ethnic groups. Evidence of this close interaction between formal institutions and informal institutions in Kenya is reflected in a number of events in which heads of parastatal enterprises, the military, police and security apparatus were appointed along ethnic lines and then backed up by corresponding legal formal institutions (Widner, 1992). Public goods provision (i.e. roads construction) was done along ethnic lines yet backed up by legal framework (Burgess et al., 2013).

Given our argument that formal institutions in Kenya closely tracked behaviour of political agents and the interaction between formal and informal institutions in the country, this paper will first test empirically if indeed institutions have persisted in Kenya using de-jure formal proxies. It will explore the reasons for such persistence. It aligns theoretically with the framework proposed by North and Thomas (1973a) that persistence of institutions is implied in path dependence. Thus a test of path dependence remains largely a test for persistence of institutions. The concept of path dependence was developed by Arthur (1994) and David (1994, 1985). It refers to situations where the formation of current economic or institutional outcomes are shaped by the path of earlier outcomes and not simply by current conditions. In that sense, history may have a lasting effect on shaping current economic or institutional outcomes. According to Page (2006) path dependence may arise due to: increasing returns to scale, self-enforcement, positive feedback, and lock-in effects .

Page (2006) further provides rigorous definitions for the concept of path dependence, which enables this study to test the assumption of persistence of our newly constructed institutional variables.Two distinct concepts that relate to the issue of path dependence are of interest: Outcome dependence and equilibrium dependence. First, a dynamic process is *outcome dependent* if the current outcome y_t is determined by past outcomes y_{t-s} where $s = 1, ..., t$. In Page's parlance, an outcome dependent process is said to be *phat dependent* when the history of outcomes matters but not the sequence (order) in which that history has occurred. On the other hand, an outcome dependent process is *path dependent* if the sequence of events in history matters. Secondly, the data generating process (the distribution function) that transforms past outcomes into current outcomes is *equilibrium dependent* if the limiting process or distribution does not converge to a unique probability distribution function.

3.2.2 Political Institutions vs. Economic Institutions Hypothesis

In their latest book, Acemoglu and Robinson (2012) make the compelling proposition that broad-based/inclusive political institutions are a prerequisite for building the kind of economic institu-

tions from which growth can translate into sustainable development. Using historical examples to support their argument on why some nations fail and others succeed, Acemoglu and Robinson (2012) theorize that the political institutions which they claim cause economic institutions are the root cause of these two outcomes. These authors further theorize that such political institutions can be divided into two groups-extractive institutions and inclusive institutions. By extractive institutions, they refer to the type of institutions that are exploitative while the inclusive institutions are those that allow many people to be included in the process of governance and the exploitation process is usually absent. This hypothesis has not been empirically tested as it is fairly recent. This study makes the first attempt to test this proposition in the context of Kenya. It adopts a simplified causality approach in assessing whether there is a causal link coming from political institutions to economic institutions.

3.2.3 Institutions vs. Economic Development Hypothesis

The economic theory on the role of institutions on economic development following the seminal work of Douglass North has emphasized the importance of property rights institutions and political institutions in particular, in driving the process of economic development (Acemoglu and Robinson, 2012; Rodrik et al., 2002; Easterly and Levine, 2001; Acemoglu et al., 2001; Engerman and Sokoloff, 2000; North, 1990, 1987a). This causality coming from institutions to economic development is premised on the argument that institutions provide the basic economic incentive structure that stimulates investment in the key proximate causes of development: Human capital, physical capital and technological change. The overall economic incentive structure itself is built on the assumption that sound institutions lower transaction costs thereby accelerate the rate at which exchange takes place among economic agents(Fedderke and Klitgaard, 2013).

Aron (2000) echoes this argument and further elaborates that transaction costs are higher when property rights or the rule of law are not reliable. Under such situations, he points out that firms typically operate on a small scale, perhaps illegally in an underground economy, and may rely on bribery and corruption to facilitate operations. He further points out that transformation costs

too can be raised substantially because long-term contracts cannot be enforced hence firms are bound to rely on short term contracts. The contractors use cheap technology which is often inefficient and uncompetitive. He concludes therefore that when institutions are poorly defined or if there are few formal institutions, economic activities are restricted to interpersonal exchanges. In such cases, repetitive activities and cultural homogeneity facilitate self-enforcement. Hence, the basic structure of property rights that encourage long-term contracting appears essential for the creation of well functioning markets and economic growth and development. The foregoing arguments tend to corroborate the the theory that the direction of causality comes from institutions to economic development. On the empirical front, this causal link has been defended and ascertained to be both strong and robust (Fedderke and Klitgaard, 2013; Rigobon and Rodrik, 2005; Acemoglu et al., 2001).

However, some scholars argue for the reverse link. The basis for this opposite argument is the Modernization theory following the seminal contributions of Lipset (1959). According to this theory, economic development brings with it the requirement for institutional evolution, and that if development is to be sustained, institutional development will itself be unavoidable (Fedderke and Klitgaard, 2013). The burgeoning amount of empirical studies based on cross country analyses has attempted to assess the validity of this theory. The evidence from these studies finds a direct causal link coming from development to institutions. Thus providing support for the modernization theory (see Boix, 2011; Benhabib et al., 2011; Barro, 1991). However, a recent paper by Acemoglu et al. (2008) claims not to find any causal effect of income on various measures of democracy for instance. These authors argue that the asserted strong correlation between the two breaks down when they control for time and country fixed effects using postwar data (1960-2000) in their sample of countries. They posit that both democracy and higher income are caused by underlying changes in institutional arrangements and specific historic events. This alternative view they call "critical junctures hypothesis"(see Acemoglu et al., 2009).

However, Heid et al. (2012) criticise Acemoglu and Robinson (2008)'s methods in that they do not take into account the persistent nature of both democracy and income. They argue that when

such persistence is taken into account, they establish a strong link between the two variables in the postwar period for a sample of 150 countries, and that their estimates are robust across different model specifications and instrumental sets. Given these strikingly different views, the question that arises is whether the causality between development and institutions holds at country specific level? If it does, from what direction does the influence come?

3.3 Empirical Methods

This section presents the methods used to test the basic claims and the corresponding questions posed in the foregoing section. These are-that institutions are persistent, that there is causality between institutions and economic development, and that political institutions cause economic institutions. However the estimation of empirical models in the thesis is potentially subject to the problem of endogeneity of explanatory variables because of the likely feedback effects between institutions and economic development measures. It is reasonable to argue that institutions and economic development outcomes are jointly determined, therefore subjecting our empirical outcomes to some degree of bias. To address the problem of endogeneity bias in our empirical analysis, we adopt a common approach used in time series literature of using the lag of variables as instrumental variables within an Autoregressive Distributed Lag Models. The broader argument to support the use of internal instruments (lag of variables) is that it may be impossible to find highly convincing instruments for variations in institutions and measures of economic development. As suggested by Clemens et al. (2012), the use of first differencing approach in which explanatory variables enter in their lagged form is recommended and identification comes from variations within the country overtime. This approach helps overcome reverse causality. We however acknowledge that this approach is not without criticism.

3.3.1 Methods To Test Persistence (Path Dependence) of Institutions

Claim 1: *The Colonial Institutions have Persisted in Kenya*

To test this claim, this research follows Freeman (2012) and uses the univariate Time Series models in the framework of path dependence developed by Page (2006). Freeman (2012) shows that a linear Time Series model with constant coefficients embodies all concepts associated with outcome dependence, and phat dependence if variables under consideration exhibit cointegration. That is to say a typical unit root test can be used to detect both an early outcomes dependence and phat dependence process of a set of variables. Indeed, the random walk model $y_t = y_{t-1} + \varepsilon_t$ whose solution is given as $y_t = y_0 + \sum_{i=1}^{t} \varepsilon_{t-i}$ implies that the variable y_t depends on early outcomes y_0 and the sum of past shocks which are all equally weighted so that the sequence of history is irrelevant. In addition because the variance of the outcome is usually time dependent in the case of a random walk, the limiting distribution of outcomes will typically not converge so that the random walk is also equilibrium dependent. Thus, all variables that exhibit non-stationary behaviour are outcome dependent and phat dependent (see Page 2006:97).

Both the Dickey Fuller Generalized Least Squares (DFGLS) test and NG-Perron tests are used to investigate whether institutions are path dependent. The NG-Perron test is performed to check robustness of the results. The choice of these tests is based on the argument that they circumvent some of the problems inherent in the standard ADF test such as the weak power and size distortions (Elliott and Stock., 1966).

The Dicky Fuller Generalized Least Squares runs on the following detrended model:

$$\Delta y_t^d = \pi y_{t-1}^d + \sum_{j=1}^{p} \psi_j \Delta y_{t-j}^d + \varepsilon_t \qquad (3.1)$$

Under this test, the data is detrended such that $y_t^d = y_t - \beta_{\bar{\theta}}' D_t$ where D_t contains deterministic terms (i.e. trends and constants). Our null hypothesis is that $\pi = 0$ in equation (3.1)which implies that our institutional series is a non-stationary against an alternative of stationary process. Table 3.1 reports the statistics from these two tests.

3.3.2 Methods to Test Causality Between Institutions, and Institutions and Economic Development

To test the remaining two propositions-that there is causality between institutions and economic development, and that political institutions cause economic institutions, this research employs the standard causality test proposed by Granger (1969) and Granger (1969, 1988) and discussed in Geweke et al. (1983). This test is based upon the estimation of autoregressive or vector autoregressive (VAR) models. This test is chosen over other alternative techniques because of its favourable response to both large and small samples (Granger, 1988). Granger (1969, 1988) show that if the two Time Series are individually integrated of the same order, $I(1)$, then there exists causality between them at least in one direction. They further show in what is known as the "Granger Representation Theorem" that such cointegrated variables could be modeled as a VAR process in terms of the levels of data, $I(1)$ or in terms of their first difference, $I(0)$ with an addition of error correction term, (ECM_{t-1}) to capture the short-run dynamics. However, if variables are $I(1)$ but not cointegrated, causality test cannot be derived correctly unless the variables are transformed into stationary series.

Therefore the Granger (1988) causality test is performed on the $I(1)$ variables (that is those that exhibit cointegration) (see equation (3.9) and (3.10) for specification). For the variables that are differenced (I(0)), the error correction term is included in the regression during the causality testing as it is shown in equation (3.15) and (3.16). This second step is performed principally to provide the robustness checks for the results.

However, there are two caveats that have emerged in the econometric literature regarding the conclusions drawn from the application of these tests in practice. These are that they are fragile due to the *ad hoc* choice of the lag length, and that they are likely to suffer from spurious causality due to the absence of cointegration (Oxley and Greasley, 1998). In the light of these caveats, the three stage procedure as outlined in Oxley and Greasley (1998) is followed. To this end, all variables are first tested for the order of integration using the commonly used tests of stationarity-

the Dickey Fuller (DF) test and the Dickey Fuller Generalized Least Squares (DFGLS) test. The second test is applied to check the robustness of the results from the first. In the second step, and conditional on the results from the stationarity test, the cointegration of the variables in the bi-variate equations is investigated using the Johansen cointegration test and the ARDL Bounds test where applicable. In the third step, the error correction term from these results where cointegration exists is taken and incorporated it into the model of short-run dynamics. Finally, the standard causality type test with lagged error correction term is performed where appropriate.

Testing for Cointegration: the Johansen VECM Approach

To test for cointegration between the variables of interest, two approaches. These are the system based approach proposed by Johansen and Juselius (Johansen, 1991; Johansen and Juselius, 1990) and the Pesaran, Shin and Smith (PSS) Bounds Test approach proposed by Pesaran et al. (2001). The system based approach is used for all variables that are integrated of the same order and the PSS approach for those that are integrated of different orders, the $I(0)$ and $I(1)$ variables. The system based approach is preferred to the commonly used single–equation Engle and Granger (1987) two-step procedure, and the single-equation conditional error correction model (ECM) test proposed by Ericsson and MacKinnon (2002) because it turns out to have less power distortions in small samples which makes it superior to other tests that tend to have smaller sample size distortions (Haug, 1996 cited in Herzer et al. (2008)). However, it requires that all variables be integrated of the same order. The Bounds test relaxes this restriction and allows for the test of cointegration between variables integrated of different orders. Specifically, the test has the additional advantage of yielding consistent estimates of the long-run coefficients that are asymptotically normal irrespective of whether the underlying regressors are $I(1)$ or $I(0)$. Therefore, the latter test is applied in case of the Institutions-Development relationship since GDP per capita growth is integrated of order zero, $I(0)$ while institutional indicators are integrated of order one, $I(1)$. This notwithstanding, each method has specific advantages and disadvantages given particular assumptions about the data generating process.

Under the Johansen test of cointegration, the trace test is used because of its superior power in small samples Luutkepohl et al. (2002). Specifically, the reduced rank of the Π is tested where $r > 1$, i.e. there is more than one cointegrating relationship present in the data against the null hypothesis of one cointegration vector[14]. In cases where more than one cointegrating relationship is found, we take theory-guided approach following Pesaran and Shin (1998) to impose the just-identification restrictions and these restrictions help identify the unique cointegrating vectors in our set of variables.

Testing for Cointegration: the ARDL Bounds Approach

The bounds test procedure also known as the PSS F-test was developed by Pesaran et al. (2001) and has been proposed in the economic literature for investigating long-run association among time-series variables that are integrated of different orders[15]. This test is based on the Ordinary Least Squares (OLS) estimation of the Conditional Unrestricted Error Correction Model (UECM) for cointegration analysis. It relies on the F-statistic generated from the cointegration equation which is compared with the critical F-statistic documented by Pesaran et al. (1996). In its generalized form, the test is performed on equation (3.4) and (3.5) which are derived from the *ARDL*of order $(p, q_1, q_2, ...q_k)$ given in equation (3.2):

$$\phi(L,p)y_t = c_0 + \sum_{i=1}^{p-1} \beta_i(L,q_i)x_{it} + \delta' w_t + \varepsilon_t;\ t = 1,...n \tag{3.2}$$

where,y_t is the dependent variable, c_0 is the constant term, x_{it} are the independent variables, L is lag operator, and w_t is the $s\,x\,1$ vector of deterministic variables including intercept terms, dummy variables, time trends and other exogenous variables with fixed lags, $\phi(L,p) = 1 - \phi_1 L - \phi_2 L^2 - \phi_3 L^3 - ....\phi_p L^p$ and $\beta_i(L,q_i) = 1 - \beta_{i1} L - \beta_{i2} L^2 - \beta_{i3} L^3 - ...\beta_{iq} L^q$

[14]See Appendix to this Chapter for the mathematical exposition for the VECM
[15] see Pesaran et al. (2001) for a comprehensive description of this technique

The conditional unrestricted error correction model version of the ARDL model is presented in equation (3.3) and is obtained by taking the first difference of equation (3.2) and retaining a set of variables in w_t:

$$\Delta y_t = c_0 + c_1 t + \Pi_{yx} Z_{t-1} + \sum_{i=1}^{p-1} \eta_i \Delta y_{t-i} + \sum_{i=0}^{q-1} \theta_i \Delta x_{t-i} + \delta' w_t + \varepsilon_t;\ t = 1, \ldots n \tag{3.3}$$

where $\triangle$ is the first difference operator, t is the trends, the coefficients η_i and θ_i express the short-run dynamics of the model's convergence to equilibrium, and $Z_{t-1} = (y'_{t-1}, x'_{t-1})$ expresses the variables under consideration in level form. The error term ε_t could be partitioned into $(\varepsilon_{yt}, \varepsilon'_{xt})$ and the long-run multiplier matrix as $\Pi = \begin{bmatrix} \pi_{yy} & \pi_{yx} \\ \pi_{xy} & \pi_{xx} \end{bmatrix}$. Then under the assumption that $\pi_{xy} = 0$, it follows that:

$$\Delta y_t = c_0 + c_1 t + \pi_{yy} y_{t-1} + \pi_{xx} x_{t-1} + \sum_{i=1}^{p-1} \eta_i \Delta y_{t-i} + \sum_{i=0}^{q-1} \theta_i \Delta x_{t-i} + \delta' w_t + \varepsilon_{yt};\ t = 1, \ldots n \tag{3.4}$$

$$\Delta x_t = c_0 + c_1 t + \pi_{xx} x_{t-1} + \sum_{i=1}^{p-1} \eta_i \Delta y_{t-i} + \sum_{i=0}^{q-1} \theta_i \Delta x_{t-i} + \delta' w_t + \varepsilon_t;\ t = 1, \ldots n \tag{3.5}$$

From equation (3.5) since $\pi_{xy} = 0$, there is no dynamic feedback from the level of y_t to x_t in the long-run. In other-words, $\{x\}_{t=1}^{\infty}$ in the long-run is weakly exogenous to $\{y\}_{t=1}^{\infty}$. However, the possibility that $\{y\}_{t=1}^{\infty}$ Granger causes $\{x\}_{t=1}^{\infty}$ in the short-run is possible.

The PSS F-test, tests for the absence of any level relationship between y_t and x_t by testing for the exclusion of lagged variables y_{t-1} and x_{t-1}. This test is based on the hypothesis that $\pi_{yx} = 0$, under the sequential treatment of all variables in the specification as the outcome variables. The rejecting of the null hypothesis establishes the existence of a level relationship, hence the rejection of the weak exogeneity for the $y-$variable specified under the test. In the present case, the PSS

F-test is operationalised by considering the Conditional Autoregressive Distributed Lag ($ARDL$) error correction model of the empirical specification given in equation (3.6):

$$\Delta lnGDP_t = c_0 + c_1 t + \varphi_1 lnGDP_{t-1} + \varphi_2 lnIns_{t-1} + \sum_{i=1}^{2} \eta_i \Delta lnGDP_{t-i} + \sum_{i=1}^{2} \theta_i \Delta lnIns_{t-i} + \delta' w_t + \varepsilon_{yt}; \quad (3.6)$$

The order of augmentation is determined by the need to ensure that the error term is free of any systematic variation in order to extract the long-run relationship. The null hypothesis of "no long-run relationship" is specified in equation (3.7) and is tested against the alternative hypothesis given in equation (3.8) using the standard Wald test or the F-statistic:

$$H_0 : \varphi_1 = \varphi_2 = 0 \quad (3.7)$$

$$H_1 : \varphi_1 \neq \varphi_2 \neq 0 \quad (3.8)$$

However, this F-statistic has a non-standard distribution and it is influenced by whether the variables are $I(0)$ or $I(1)$. To circumvent this weakness, Pesaran et al. (2001) tabulate the two asymptotic critical values to be used. The upper bound critical value of F denoted by F_U assumes that all variables are $I(1)$ and the lower bound critical statistic denoted by F_L assumes that all variables are $I(0)$. If the estimated F-statistic is greater than the upper bound critical F-statistic ($\hat{F} > F_U$), we reject the null hypothesis of "no long-run" relationship between level variables and conclude that there is a long-run relationship between the variable of interest. On the other-hand if F-statistic computed is lower than the lower bound critical value proposed by Pesaran et al. (2001) ($\hat{F} < F_L$), we cannot reject the null hypothesis of "no long-run" relationship between variables of interest. If F-statistic computed falls between these critical values ($F_U > \hat{F} > F_L$), the result is inconclusive.

However, Narayan (2005) notes that the critical values provided by Pesaran et al. (2001) cannot be used in small samples since they were generated for large samples sizes (i.e. 500 and 1000

observations and 20 000 and 40 000 replications respectively). He then tabulates the critical values for smaller samples of size 30 to 80 observations, using the same GAUSS code as Pesaran et al.,(2001). The critical values he reports are smaller than those generated and reported by Pesaran et al. (2001). Therefore given the small sample size used in this chapter (50 observations), the analysis is based on the critical values provided by Narayan (2005). During the estimation process, political regime shifts is controlled for through the use of the impulse dummy variables. Impulse dummy variables are used because they enable the three political transition periods to be characterised corresponding to the transition from the Colonial regime to Kenyatta's regime, from Kenyatta's regime to Moi's regime, from Moi's regime to Kibaki's regime. Thus 1963=1 and zero otherwise; 1978=1 and zero otherwise; 2002=1 and zero otherwise respectively. These transition periods represent different policy and institutional discharges by different regime leaders which could potentially affect the other macroeconomic variables in the model. The ordinary least squares (OLS) is then applied to equation (3.6) in order to test for the existence of a long-run relationship among the variables by conducting an F-test for the joint significance of the coefficient of the lagged levels of the variables. Next, the causality test is run for all equations of interest. The causality procedure followed is outlined below.

Causality Test Model Specifications

Claim 2: *Institutions affect Economic Development in Kenya*

The above claim states that there is a causal link between institutions and economic development. The literature on this link has presented mixed results as discussed in the previous sections. More specifically some authors have argued that development/income leads to better institutions (the Modernization hypothesis) while others see the link coming from institutions to both income and democracy (the Critical Juncture hypothesis). The standard causality test employed here to test

this claim is based on the following set of equations[16]:

$$Y_t = \alpha_1 + \sum_{i=1}^{n} \theta_{1i} I_{t-i} + \sum_{j=1}^{m} \theta_{2i} Y_{t-j} + \varepsilon_t \tag{3.9}$$

$$I_t = \alpha_1 + \sum_{j=1}^{q} \beta_{1j} Y_{t-j} + \sum_{j=1}^{r} \beta_{2j} I_{t-j} + v_t \tag{3.10}$$

where ε_t and v_t are zero-mean, serially uncorrelated random disturbances; Y_t is the measure of economic development at time t; I_t is the measure of the quality of institutions at time t; n, m, q and r are lag lengths chosen on the basis of minimizing the Akaike's Final Prediction Error (FPE) following Giles et al. (1992). The specific hypothesis tested is:

$$H_0 : \theta_{11} = \theta_{12} = \theta_{13} = ... = \theta_{1n} = 0 \tag{3.11}$$

$$H_{1i} : \theta_{1i} \neq 0 \; at\ least\ one\ \theta_{1i} \neq 0 \; for\, i = 1, ..., n \tag{3.12}$$

Therefore the rejection of the null hypothesis implies that I Granger causes Y $(I \Rightarrow Y)$. Similarly, Y Granger causes I $(Y \Rightarrow I)$ if the following null hypothesis is rejected:

$$H_0 : \beta_{1j} = \beta_{12} = \beta_{13} = ... = \beta_{jn} = 0 \tag{3.13}$$

$$H_{1j} : \beta_{1j} \neq 0 \; at\ least\ one\ \beta_{1j} \neq 0 \; for\, j = 1, ..., q \tag{3.14}$$

The second test that serves also as the robustness check is based on the differenced data series. As it is argued earlier, according to Granger (1988) if the cointegration system of the two series can be expressed in the ECM representation, then there must be causality ordering in at least one direction. Hence, the long-run causality test between institutions and economic development is implemented by estimating the following bi-variate error correction model:

[16] see also Zhang (2001); Hansen and Rand (2006, for the use of these methods) for similar specifications

$$\Delta Y_t = \alpha_1 + \sum_{i=1}^{n} \theta_{1i} \Delta Y_{t-i} + \sum_{j=1}^{m} \theta_{2i} \Delta I_{t-j} + \delta ECM_{t-1} + \varepsilon_t \quad (3.15)$$

$$\Delta I_t = \alpha_1 + \sum_{j=1}^{q} \beta_{1j} \Delta I_{t-j} + \sum_{j=1}^{r} \beta_{2j} \Delta Delta Y_{t-j} + \Phi ECM_{t-1} + v_t \quad (3.16)$$

where: $ECM_{t-1}$is the one period lagged error correction term captured from the cointegration regression; Y_t is the measure of economic development (the real GDP growth per capita (RGDPpc)) at time t; I_t is the measure of the quality of institutions (both the political rights and civil liberties, and property rights-freehold rights and customary rights) at time t; $\varepsilon_{1t}$and ε_{2t} are uncorrelated white noise residuals; α_1 and α_2 are constants;$\theta_{1i}, \beta_{1j} and\, \theta_{2i}, \beta_{2j}$ are coefficients of lagged dependent and explanatory variable respectively; $n, m, q\ and\ r$ are the lag length of variables chosen on the basis of minimizing the Akaike's Final Prediction Error (FPE) following Giles et al. (1992).

Since $\Delta logY_t$ and $\Delta logI_t$ represent the first difference of variables, they must be stationary and the right hand side must as well be stationary provided that_ε_{1t} and ε_{2t} are stationary. Thus equation (3.15) and (3.16) represent a bi-variate VAR in the first differences of variables augmented by the error correction term ECM_{t-1}. The test for the long-run causality between variables of interest is implied through the significance of the t-statistics of the lagged error correction term while the short-run causality is inferred through the F-statistics which is estimated following the Wald procedure by comparing the residual sum of squares under the unrestricted model with the residual sum of squares under the restricted one.

Specifically, the hypothesis tested is:

$$H_0 : \theta_{21} = \theta_{22} = \theta_{23} = ... = \theta_{2n} = 0\ or\ \delta_1 = 0 \quad (3.17)$$

$$H_{2i} : \theta_{2i} \neq 0\ at\ least\ one\ \theta_{2i} \neq 0\ for\, i = 1, ..., n\ or\ \delta_1 \neq 0 \quad (3.18)$$

Therefore the rejection of the null hypothesis implies that ΔI Granger causes ΔY $(\Delta I \Rightarrow \Delta Y)$.

Similarly, ΔY Granger causes ΔI $(\Delta Y \Rightarrow \Delta I)$ if the following null hypothesis is rejected:

$$H_0 : \beta_{21} = \beta_{22} = \beta_{23} = ... = \beta_{jn} = 0 \; or \; \Phi = 0 \tag{3.19}$$

$$H_{2j} : \beta_{2j} \neq 0 \; at \; least \; one \; \beta_{2j} \neq 0 \; for \; j = 1, ..., n \; or \; \Phi \neq 0 \tag{3.20}$$

Claim 3: *Political Institutions drive Economic Institutions in Kenya*

As noted earlier this proposition follows directly from the recent works of Acemoglu and Robinson (2012); North (1993). It states that political institutions cause economic institutions. That implies that there is at-least one directional causality flowing from political institutions to economic institutions. To test this hypothesis, the same strategy is followed here to the one discussed under claim II. The variables included in the test however are only institutional variables. This strategy is implemented on the following set of equations:

$$Fhpr_t = \alpha_1 + \sum_{i=1}^{n} \theta_{1i} Fhpr_{t-i} + \sum_{j=1}^{m} \theta_{2i} Prcl_{t-j} + \varepsilon_t \tag{3.21}$$

$$Prcl_t = \alpha_1 + \sum_{j=1}^{q} \beta_{1j} Prcl_{t-j} + \sum_{j=1}^{r} \beta_{2j} Fhpr_{t-j} + v_t \tag{3.22}$$

where ε_t and v_t are zero-mean, serially uncorrelated random disturbances; $Fhpr_t$ is the measure of quality of economic institutions at time t; $Prcl_t$ is the measure of the quality of political institutions at time t; n, m, q and r are again lag lengths chosen on the basis of minimizing the Akaike's Final Prediction Error (FPE) following Giles et al. (1992). The hypothesis to be tested is specified as under claim II. The test is also performed on the differenced variables as specified in equation (3.23) and (3.24) below:

$$\Delta Fhpr_t = \alpha_1 + \sum_{i=1}^{n} \theta_{1i} \Delta Fhpr_{t-i} + \sum_{j=1}^{m} \theta_{2i} \Delta Prcl_{t-j} + \delta ECM_{t-1} + \varepsilon_t \tag{3.23}$$

$$\Delta Prcl_t = \alpha_1 + \sum_{j=1}^{q} \beta_{1j} \Delta Prcl_{t-j} + \sum_{j=1}^{r} \beta_{2j} \Delta Fhpr_{t-j} + \Phi ECM_{t-1} + v_t \quad (3.24)$$

where: $ECM_{t-1}$is again the one period lagged error correction term captured from the cointegration regression; $Fhpr_t$ is the proxy for the quality of economic institutions (property rights variable) at time t; $Prcl_t$ is the variable that captures the quality of political institutions (political rights and civil liberties) at time t; $\varepsilon_{1t}$and ε_{2t} are uncorrelated white noise residuals; α_1 and α_2 are constants;$\theta_{1i}, \beta_{1j} and\, \theta_{2i}, \beta_{2j}$ are coefficients of lagged dependent and explanatory variables respectively. The long-run and short-run causal relationship is inferred in the same manner as discussed under proposition II above.

3.3.3 Variables, Data and Stylized Facts

This study uses an annual dataset on real GDP per capita growth for Kenya and a set of the institutional indicators to test the claims discussed in the foregoing section. The data on real GDP per capita growth is obtained from the World Development Indicators for 2012. Data on economic institutions is proxied by the freehold property rights index and customary rights index, and that on political institutions is proxied by the political rights and civil liberties index. These indicators are computed from the formal legislative history and legal framework[17] governing immovable property (land), and that which affect citizen's political rights and civil liberties in a society respectively. The computation procedure for the latter dataset is explained in the previous chapter and in Letete et al. (2011). All variables span a 50-year (1960-2010) period. The use of property rights as a proxy for economic institutions is well established in the new institutional economics literature[18] followed in this study. Similarly, the use of political rights and civil liberties as a proxy for political institutions also finds support in the same literature (Fedderke and Klitgaard, 2013; BenYishay and Betancourt, 2010). However it is worth highlighting the two basic premises on which it is based. First, these indicators as argued in BenYishay and Betancourt (2010) are the

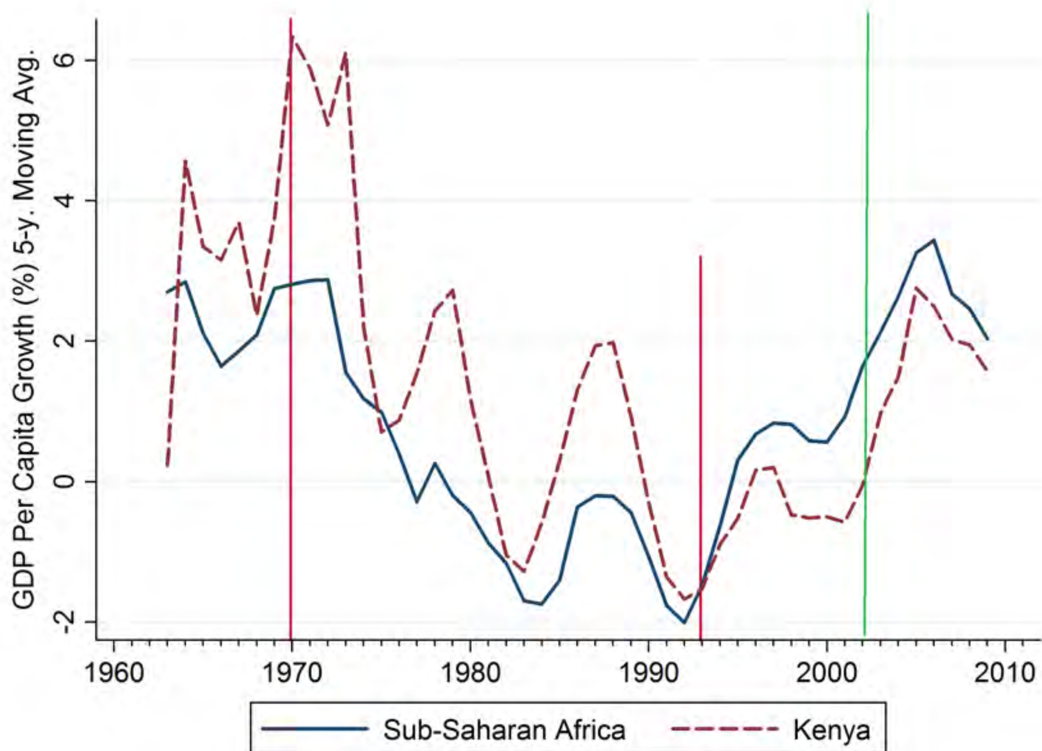
[17] Formal legislative history and legal framework here refer to Acts of Parliament, Amendments, and Proclamations to already existing statutes as well as proclamations and parliamentary approved directives issued under the aegis of enabling legislation.

[18] Acemoglu and Akcigit (2012); Besley and Ghatak (2009); Fedderke et al. (2001); Acemoglu (1995); North (1987a)

fundamental indicators of the prevalence of the rule of law in a society. Second, the prevalence of the rule of law itself is a key factor determining the rate of economic growth and development of an economy in the longterm.

The evolution of these institutional indicators over time is discussed in detailed in the previous chapter. The only variable that merits a brief discussion is real GDP per capita growth. Figure (3.1) plots real GDP growth for Kenya and that of Sub-Saharan African (henceforth SSA) countries (5-year moving average) during the five decade of the post-colonial rule.

Figure 3.1: Evolution of GDP per capita growth in Kenya and Sub-Saharan Africa, 1963-2011



During the first period (the Kenyatta regime) Kenya achieved commendable economic growth compared to the rest of the SSA countries. During this period the real GDP growth per capita grew at 3 percent per year on average. As the population growth continued to exceed growth in incomes, real per capita growth declined. Thus the growth acceleration of the early years of independence was followed by deceleration between 1980 and 1990. In this period, the economy realized negative per capita growth rates and this marked the period of stagnation. During this period, the economy faced a number of macroeconomic challenges such as the balance of payments crisis. This period was also characterized by lack of respect for the rule of law and the collapse in both political and economic institutions. It was during this period that a number of policy reversals were observed in the economy. Moi's regime became the failed regime. Real growth per capita recovered in 2002 following three decades of stagnation and crisis. However, growth recovery that occurred during Kibaki's regime was not sustained as the economy suffered once again the negative per capita growth rates in 2007 following the post election violence. Given these dynamics in growth performance, the question is whether weak institutions could explain this growth path. I will turn to this question under the analysis of causality between economic development and institutions.

3.4 Empirical Evidence

3.4.1 Are Institutions Persistent?

The first issue addressed is whether institutions are indeed persistent. Table (3.1) presents the results for the test of persistence of institutions. The statistics for the DFGLS are reported for the level of variables denoted by Z, and for the first difference of variables denoted by ΔZ. The statistics for the first difference are reported for NG-Perron test since the aim of using this test was only to verify that indeed our variables are first difference stationary. The DFGLS test statistics for all the variables expressed in the level form are below the 95% critical values suggesting that we cannot reject the null hypothesis of unit root. However, the first difference of all the institutional

variables turn out to be stationary. The DFGLS statistics are greater than the 95% critical values indicating that we reject the hypothesis of unit root (non-stationarity) for the first difference of variables. These findings are supported by the NG-Perron test.[19] These results indicate that all our institutional variables are integrated of order one (i.e. $\sim I(1)$).

The test statistics show that all the institutional indicators exhibit the non-stationarity characteristic, which suggests the existence of path dependence. The non-stationarity of various institutional series implies that the institutions are both outcome dependent and phat dependent. This implies that the level of institutions observed today depends on the past realization of institutions. Hence, the key contemporary institutions in the independent Kenya State have been shaped by Kenya's colonial past. Despite numerous amendments to these institutions during the post independence period, they have shown a great deal of resilience and persistence. This result justifies the proposition that although institutions change, they are persistent over time. These results are robust to alternative econometric models used-be it DFGLS or NG-Perron test.

These results are of interest for two reasons. First, it is to the best of the author's knowledge, the first econometric attempt to test the hypothesis of institutional path dependence in the case of Kenya. Second, it provides strong support in favour of this assumption which has been made time and again in the institutions-development literature. An example is Acemoglu et al. (2001) who use the argument of the persistence of institutions to justify their instrumentation strategy. Although one observes some volatility on political institutions as reflected in figure 2.1 in the previous Chapter, such volatility is one time event that we also control for using a dummy variable. Therefore the possibility of having dummy variables dummying out the episodes of institutional

[19]The NG-Perron test relies on four statistics, MZ_{α}, MZ_{T}, MSB and MP_{T}. The first two of these statistics are negative and the other two are positive (see Table 3.6). Therefore for us to decide whether there is unit root, we compare the two positive statistics and the two negative statistics with the 95 percent critical values provided by NG-Perron. If the computed negative and positive statistics are less than the NG-Perron critical values, we reject the hypothesis of unit root and conclude that the variables are stationary. Table 3.6, shows that the computed negative statistics for all variables are less than the NG-Perron negative critical values and the computed positive statistics for all variables are less than the positive critical values hence we reject the unit root hypothesis and conclude that our variables are stationary at first difference.

Table 3.1: Tests results for Persistence of Institutions/Path Dependence

		DF-GLS		Ng-Perron				
Variable	Lag p	DF-GLS	DF-GLS	MZ_{α}^{GLS}	MZ_{T}^{GLS}	MSB^{GLS}	MP_{T}^{GLS}	Inference
		Z	ΔZ	ΔZ				
$prcL$	2	−0.73	−5.30	−23.13	−3.30	0.14	1.37	$I(1)$
$nfhpr$	3	−0.89	-6.64^{***}	−23.47	−3.47	0.14	1.09	$I(1)$
$fhpr$	3	−1.07	-6.82^{***}	−24.49	−3.46	0.14	1.11	$I(1)$
PoI	1	−1.27	-13.30^{***}	−16.13	−2.79	0.17	1.69	$I(1)$

Asterisks ***, ** and * indicate significance levels at 1%, 5% and 10% level of significance respectively

$\triangle$= first difference. Variables are defined in Table 2.7

The DF-GLS critical statistics are -2.59, -1.94 and -1.61 at 1%, 5% and 10% level of significance respectively.

Ng-Perron critical values at 1% level of significance are -13.8; -2.58; 0.174 and 1.78,

while at 5% are: –8.10; -1.98; 0. 23 and 3.17 for MZ, MZt, MSB, and MPT respectively.

Ng-Perron critical values at 10% are: –5.70; -1.62; 0.275 and 4.45 for MZ_{α},MZ_{t}^{GLS}, $MSB^{GLS}$and MP_{T}^{GLS}

change and creating bias in favour of persistence is less likely. Nonetheless, such possibility is acknowledged.

The standard vector error-correction model (VECM) is also used to examine further if the institutional variables exhibit equilibrium dependence. Freeman (2012) notes that according to Page (2006)'s framework, there are two possibilities of equilibrium dependence: (1). outcome dependence and non-equilibium dependence and (2). outcome dependence and equilibrium dependence. The concern here is with the later dependence. The cointegrating term $\Pi Z_{t-1} = \alpha\beta' Z_{t-1}$ from the equation 3.31 highlighted earlier and reproduced below for ease of reference embodies both early outcomes dependence and phat dependence due to the presence of unit root through variable in Z_{t-1}. This is similar to the random walk case discussed earlier. In this model, *sequence outcome dependence* (in the sense that the order of history matters) is also present since the short run dynamics hinge upon time-varying weights Γ_i where $i = 1, ..., p-1$ (Freeman, 2012).

$$\Delta Z_t = \Pi Z_{t-1} + \sum_{i=1}^{p-1} \Gamma_i \Delta Z_{t-i} + \mu + u_t \tag{3.25}$$

Finally, even in the long equilibrium where $\beta' Z_{t-1} = 0$, there may be past movements in $\sum_{i=1}^{p-1} \Gamma_i \Delta Z_{t-i}$ which prevent ΔZ_t to end up in a rest point. As a result, equilibrium dependence is possible even in the long run equilibrium. In other words, if the rank of the π matrix is zero, the system amounts to a set of independent, first order integrated variables which implies the existence of an independent set of phat dependent processes for which the respective initial values of the variables do not decay. However, if the rank (r) of π is greater than zero but less than n, there are r cointegrating vectors. That is there are r moving equilibria between the phat outcome dependent variables.

To test for phat outcome dependence, we divide the sample into two periods-the colonial period (1884-1960) and the post colonial period (1963-2010) because they represent two distinct phases in the history of Kenya. However the phat outcome dependence relationship is still tested for the full sample (1884-2010). Table (3.2) reports the trace statistics and the maximum eigenvalue

statistics for various combinations of the institutional indicators for the sub-samples. The Table shows that political institutions ($prcl$) and economic institutions ($fhpr$ and nfhpr) display some form of long-run relationship during the colonial period (1884-1960) and during the post colonial period. These results imply that these indicators were equilibrium outcome dependent. This was particularly so between political rights and civil liberties ($prcl$) and non-freehold property rights ($nfhpr$). Thus in the long run, these institutional indicators could be represented in the form of a stable linear equilibrium association. It needs to be recalled that the test of institutional persistence is implied by both phat dependence and equilibrium outcome dependence.

The results in Table (3.2) completes our tests for institutional persistence. But why did institutions persist in Kenya? The persistence of institutions in Kenya could perhaps be understood through the events that took placed during the transition from the colonial rule to self-rule in 1963. During this transition period, the imperial government had in place a planned strategy that would safeguard their interest in the economy. This strategy aimed at preserving the interests of the settlers and was operated through collaboration with a few political elites who took over from the imperial powers. The institutions that were in place which protected the minority white settlers were never changed, especially those governing land resources. Large tracks of land were taken over through the willing buyer willing seller policy in which Kenya used the British money to acquire those pieces of land from the departing settlers. Having acquired land for themselves, the independence government had little incentive to change the structure of laws governing property rights. They also wished to grab land held under native reserves, and that which had been expropriated by the British settlers, and give it to a few political elites and those with political connections.

Secondly, the new political leadership was self interested and convinced by the capitalist mode of production. It therefore considered traditional systems of land tenure inefficient and considered that it acted as disincentive for farmers to develop their holdings. They needed to protect their investment in land resources, and therefore they promoted individualized tenure holdings in the economy. This argument finds support in the theory that persistence may result from the investment incentives (or the lack thereof) of the elites that come to power and their size. Accordingly,

Table 3.2: Results of Johansen's Cointegration Procedure (maximum lag in the VAR =2)

Rank (r)	Eigen Values	Statistics: Trace	P-value	Statistics: $\lambda-$Max	P-value	Conclusion
1884-1960	Variables included in the cointegrating space: fhpr, nfhpr and prcl (in logs)					
0	0.295824	39.65371	0.0027	24.55089	(0.0158)	Cointegration
1	0.142122	15.10282	0.0572	10.73055	(0.1682)	Long-run equilibrium exists
2	0.060550	4.372272**	0.0365	4.372272	(0.0365)	
1963-2010	Variables included in the cointegrating space: fhpr, nfhpr and prcl (in logs)					
0	0.363165	36.22065**	(0.0079)	21.65973	(0.0421)	Cointegration
1	0.232966	14.56092	(0.0688)	12.73076	(0.0861)	Long-run equilibrium exists
2	0.037411	1.830155	(0.1761)	1.830155	(0.1761)	
1884-2010	(Variables included in the cointegrating space: nfhpr and prcl (in logs)					
0	0.044144	10.14380	(0.2698)	5.282290	(0.7059)	Cointegration
1	0.040700	4.861514**	(0.0275)	4.861514	(0.0275)	Long-run equilibrium exists

it was argued that if the ruling elites are few, each would have a larger share of the resources of the country, hence the continuity of the extractive institutions. In contrast, if there are investment opportunities for such elites, they would opt for institutions that protect private property. At the same time if political elites that come to power do not possess comparative advantage in investment activities, then they would be less willing to enforce private property institutions. Indeed it is not surprising that the Kenyan political elites promoted private property in land resources.They had investment in land resources which they had acquired for themselves following the end of imperial rule and the white settlers' departure. Immediately following independence they supported agriculture with huge subsidies that were also meant to benefit themselves (Bates, 1981). In terms of political institutions, persistence is observed in an opposite direction where the ruling elites created once again a repressive state similar to that observed during the colonial period. Although just before independence political institutions had improved, they deteriorated a few years following independence. The repressive colonial structures were resuscitated. A repressive system of governance then followed. The rights of citizens were not respected by the indigenous ruling elites. This reversal of fortunes in democratic principles might have had a bearing on economic development in this economy.

3.4.2 Do Political Institutions cause Economic Institutions?

The second issue addressed is whether there is evidence of causality between political institutions and economic institutions[20]. Friedman and Friedman (2002) argue that the two institutions are mutually reinforcing. In their view, an expansion of political rights-more "democracy"fosters economic rights which in turn tend to stimulate economic growth. This view is buttressed by Acemoglu and Robinson (2012) in their recent influential book in which they argue that broad-based political institutions are a prerequisite for building the kind of economic institutions from which growth can translate into sustainable development. However, the growth retarding aspects of democracy have also been stressed (see Przeworski and Limongi, 1993). From the test of

[20]See Sirowy and Inkeles (1990),Przeworski and Limongi (1993) for complete survey on these debates.

phat dependence presented in the foregoing section, it is clear that there exists causality among institutional indicators at-least in one direction. This causality is confirmed using the standard causality tests outlined in the previous sections in equations (3.21), (3.22), (3.23) and (3.24).

Six ECM models with two lags (two for each period) are estimated, as well as six VAR unrestricted models with two lags. The results from these models are shown in Table (3.3), (3.4) and (3.5). These Tables present the error correction term (ECM_{t-1}) with its significance value and F-statistics for the different bi-variate results from different rights combinations. The causal inference in the latter column of these Tables summarizes the results. For the period 1960-2010, the results show the presence of long run causality between the political institutions measured by political rights and civil liberties $(prcl)$ and the economic institutions measured by freehold property rights$(fhpr)$. This uni-directional causality runs from political institutions $(prcl)$ to economic institutions $(fhpr)$. No reverse causality is detected coming from economic institutions to political institutions. This result lends support to the hypothesis of Acemoglu and Robinson (2012) that political institutions cause economic institutions.

During the same period, the research finds strong evidence of bidirectional causality between economic institutions measured by non-freehold property rights and political institutions proxied by political rights and civil liberties. This evidence shows that political institution $(prcl)$ drove economic institutions $(nfhpr)$ and the latter in turn drove political institution during the post independence period. These results are not surprising given that during this period, both rights worsened. The relationship between political institutions and non-freehold rights has not been a subject of discussion in the literature since measuring non-freehold property rights has been difficult. For the full sample (1884-2010), the study finds an association between political institutions and freehold economic institutions with strong causality coming from economic institution to political institutions. However the reverse causality remains very weak as this does not pass the robustness check using the level model. This result appears contrary to the claim by Acemoglu and Robinson (2012) that it is political institutions that cause economic institutions. It therefore provides the first caution that sometimes the reverse causality could hold hence the economic lit-

erature needs to consider all possibilities under different circumstances. This study however fails to find any long-run relationship between political institutions and economic institutions (measured by non-freehold property rights) during this period. For the colonial period, the results in Table (3.5) do not show any causal relationship between these rights indicators. This result is expected given that this was the time of expropriation and the white settlers did not promote the rights of citizens. There was often divergence in the rights held by white settlers and those held by the natives.

Causality Results

The results reported in Table (3.3) and (3.4) show that there is a stable positive long run relationship between political institutions $(prcl)$ and economic institutions $(fhpr)$ during the post colonial era. This relationship is statistically significant which also connotes the presence of equilibrium dependence (path dependence). The results are plausible given that the laws passed during the post colonial period affected both indices equally. Thus deterioration of land rights in both systems occurred at the same time. This relationship is supported by the evidence[21] that from the 1950s onwards, the colonial and post-colonial administrations sought to pursue drastic reforms to change the non-freehold tenure system into a privatized freehold regime with the objective of furthering the capitalistic mode of production. Specifically, this research finds the following relationship between these institution indicators:

$$\underset{(t-statistic)}{Fhpr} = 0.6839 + \underset{(3.683)}{0.8446} * Prcl \tag{3.26}$$

It also finds a stable bi-causal relationship between non-freehold property rights $(nfhpr)$ and political institutions $(prcl)$. This relationship is presented in equation (29) and (30) respectively:

[21] See the following laws which were enacted to promote free-holding in the customary land holdings: The Native Land Registration Ordinance, No.27 of 1959 (or the Land Registration Special Areas); The Land Consolidation Act of 1959 (Cap. 283), The Land Control (Native Lands), 1959; The Land Registration (special Areas) Ordinance, No.27 of 1959

Table 3.3: Bivariate Causality between Political Institutions and Economic Institutions, 1960-2010

Variables	The Long-run Causality Based on Differenced Series (ECM-test)				Inference
	Null hypothesis	Alternative hypothesis	ECM_{t-1}	P-value of ECM_{t-1}	
$[lnprcl\ and\ lnfhpr]$	$H_0 : \delta_1 = 0$	$H_1 : \delta_1 \neq 0$	-0.097^{***}	0.004	$lnprcl \Rightarrow lnfhpr$
$[lnfhpr\ and\ lnprcl]$	$H_0 : \Phi = 0$	$H_1 : \Phi \neq 0$	0.13	0.149	$lnfhpr \nRightarrow lnprcl$
$[lnnfhpr\ and\ lnprcl]$	$H_0 : \delta_1 = 0$	$H_1 : \delta_1 \neq 0$	-0.07^{*}	0.077	$lnnfhpr \Rightarrow lnprcl$
$[lnprcl\ and\ lnnfhpr]$	$H_0 : \Phi = 0$	$H_1 : \Phi \neq 0$	-0.27^{**}	0.042	$lnprcl \Rightarrow lnnfhpr$

Notes: The first variable in the square brackets under variables column is the dependent variable while the other is the independent variable

The significance levels of 1%, 5% and 10% are noted by ***, ***, and * respectively. Degrees of freedom for F-statistics = (2,44)

$\Rightarrow$indicates existence of causal relationship running from left hand variable to right hand variable while $\nRightarrow$indicates no causal relationship between variables of interest

Variables	Long-run Causality Based on Level Series (Alternative Test)			Inference
	Null hypothesis	Alternative hypothesis	$\frac{Wald-test}{(P-valuee)}$	
$lnprcl\,and\,lnfhpr$	$H_0 : \theta_{11} = \theta_{12} = 0$	$H_1 : \theta_{11} \neq \theta_{12} \neq 0$	3.69^{**} (0.033)	$lnprcl \Rightarrow lnfhpr$
$lnfhpr\,and\,lnprcl$	$H_0 : \theta_{11} = \theta_{12} = 0$	$H_1 : \theta_{11} \neq \theta_{12} \neq 0$	0.91 (0.40)	$lnfhpr \nRightarrow lnprcl$
$lnnfhpr\,and\,lnprcl$	$H_0 : \theta_{11} = \theta_{12} = 0$	$H_1 : \theta_{11} \neq \theta_{12} \neq 0$	4.57^{**} (0.010)	$lnnfhpr \Rightarrow lnprcl$
$lnprcl\,and\,lnnfhpr$	$H_0 : \theta_{11} = \theta_{12} = 0$	$H_1 : \theta_{11} \neq \theta_{12} \neq 0$	2.81^{*} (0.076)	$lnprcl \nRightarrow lnnfhpr$

Notes: The first variable in the variables column is the dependent variable. Degrees of freedom for F-statistics = (2,44)

The significance levels of 1%, 5% and 10% are noted by ***, ***, and * respectively. The numbers in parenthesis are p-values

$\Rightarrow$indicates existence of causal relationship running from left hand variable to right hand variable while

$\nRightarrow$indicates no causal relationship between variables of interest

Table 3.4: Bivariate Causality between Political Institutions and Economic Institutions, 1884-2010

	The Long-run Causality Based on Differenced Series (ECM-test)				
Variables	Null hypothesis	Alternative hypothesis	ECM_{t-1}	P-value ECM_{t-1}	Inference
$lnfhpr$ *and* $lnprcl$	$H_0 : \delta_1 = 0$	$H_1 : \delta_1 \neq 0$	-0.04^{***}	0.005	$lnfhpr \Rightarrow lnprcl$
$lnprcl$ *and* $lnfhpr$	$H_0 : \Phi = 0$	$H_1 : \Phi \neq 0$	-0.03*	0.090	$lnprcl \Rightarrow lnfhpr$
$lnnfhpr$ *and* $lnprcl$	$H_0 : \delta_1 = 0$	$H_1 : \delta_1 \neq 0$	-0.05^{**}	0.025	$lnnfhpr \Rightarrow lnprcl$
$lnprcl$ *and* $lnnfhpr$	$H_0 : \Phi = 0$	$H_1 : \Phi \neq 0$	-0.041	0.172	$lnprcl \Rightarrow lnnfhpr$

Notes: The first variable under variables column is the dependent variable while the other is the independent variable

The significance levels of 1%, 5% and 10% are noted by ***, ***, and * respectively. Degrees of freedom for F-statistics = (2,117)

$\Rightarrow$indicates existence of causal relationship running from left hand variable to right hand variable while $\not\Rightarrow$indicates no causal relationship between variables of interest

	Long-run Causality Based on Level Series (Alternative Test)			
Variables	Null hypothesis	Alternative hypothesis	$\frac{Wald-test}{(P-value)}$	Inference
$lnfhpr$ *and* $lnprcl$	$H_0 : \theta_{11} = \theta_{12} = 0$	$H_1 : \theta_{11} \neq \theta_{12} \neq 0$	904.68^{***} (0.0000)	$lnfhpr \Rightarrow prcl$
$lnprcl$ *and* $lnfhpr$	$H_0 : \theta_{11} = \theta_{12} = 0$	$H_1 : \theta_{11} \neq \theta_{12} \neq 0$	0.394796 (0.6747)	$prcl \not\Rightarrow lnfhpr$
$lnnfhpr$ *and* $lnprcl$	$H_0 : \theta_{11} = \theta_{12} = 0$	$H_1 : \theta_{11} \neq \theta_{12} \neq 0$	2.0662 (0.1313)	$lnnfhpr \not\Rightarrow lnprcl$
$lnprcl$ *and* $lnnfhpr$	$H_0 : \theta_{11} = \theta_{12} = 0$	$H_1 : \theta_{11} \neq \theta_{12} \neq 0$	0.0495 (0.9517)	$lnprcl \not\Rightarrow lnnfhpr$

Notes: The first variable in the variables column is the dependent variable. Degrees of freedom for F-statistics = (2,117)

The significance levels of 1%, 5% and 10% are noted by ***, ***, and * respectively. The numbers in parenthesis are p-values

$\Rightarrow$indicates existence of causal relationship running from left hand variable to right hand variable while

$\not\Rightarrow$indicates no causal relationship between variables of interest

Table 3.5: Bivariate Causality between Political Institutions and Economic Institutions, 1884-1960

Variables	The Long-run Causality Based on Differenced Series (ECM-test)				Inference
	Null hypothesis	Alternative hypothesis	ECM_{t-1}	P-value ECM_{t-1}	
$lnfhpr\, and\, lnprcl$	$H_0 : \delta_1 = 0$	$H_1 : \delta_1 \neq 0$	-0.0413	0.1551	$(lnfhpr \nRightarrow lnprcl)$
$lnprcl\, and\, lnfhpr$	$H_0 : \Phi = 0$	$H_1 : \Phi \neq 0$	-0.0434	0.1216	$(lnprcl \nRightarrow lnfhpr)$
$lnnfhpr\, and\, lnprcl$	$H_0 : \delta_1 = 0$	$H_1 : \delta_1 \neq 0$	0.01492	0.5088	$(lnfhpr \nRightarrow lnprcl)$
$lnprcl\, and\, lnnfhpr$	$H_0 : \Phi = 0$	$H_1 : \Phi \neq 0$	0.0216	0.0045***	$(lnprcl \Rightarrow lnfhpr)$

Notes: The first variable in the square brackets under variables column is the dependent variable while the other is the independent variable

The significance levels of 1%, 5% and 10% are noted by ***, ***, and * respectively. Degrees of freedom for F-statistics = (2,67)

$\Rightarrow$indicates existence of causal relationship running from left hand variable to right hand variable while $\nRightarrow$indicates no causal relationship between variables of interest

Variables	Long-run Causality Based on Level Series (Alternative Test)			Inference
	Null hypothesis	Alternative hypothesis	$\frac{Wald-test}{(P-value)}$	
$lnfhpr\, and\, lnprcl$	$H_0 : \theta_{11} = \theta_{12} = 0$	$H_1 : \theta_{11} \neq \theta_{12} \neq 0$	1.1560 (0.32100)	$lnfhpr \nRightarrow lnprcl$
$lnprcl\, and\, lnfhpr$	$H_0 : \theta_{11} = \theta_{12} = 0$	$H_1 : \theta_{11} \neq \theta_{12} \neq 0$	0.1104 (0.896)	$lnprcl \nRightarrow lnfhpr$
$lnnfhpr\, and\, lnprcl$	$H_0 : \theta_{11} = \theta_{12} = 0$	$H_1 : \theta_{11} \neq \theta_{12} \neq 0$	0.2639 (0.769)	$lnfhpr \nRightarrow lnprcl$
$lnprcl\, and\, lnnfhpr$	$H_0 : \theta_{11} = \theta_{12} = 0$	$H_1 : \theta_{11} \neq \theta_{12} \neq 0$	1.7332 (0.183)	$lnprcl \nRightarrow lnfhpr$

Notes: The first variable in the variables column is the dependent variable. Degrees of freedom for F-statistics = (2,67)

The significance levels of 1%, 5% and 10% are noted by ***, ***, and * respectively. The numbers in parenthesis are p-values

$\Rightarrow$indicates existence of causal relationship running from left hand variable to right hand variable while

$\nRightarrow$indicates no causal relationship between variables of interest

$$\underset{(t-statistic)}{Prcl} = 1.2182 + \underset{(4.3569)}{0.6713} * Nfhpr \tag{3.27}$$

$$\underset{(t-statistic)}{Nfhpr} = 1.8147 + \underset{(2.7864)}{1.489} * Prcl \tag{3.28}$$

For the full sample, the following long-run relationship holds between rights indicators:

$$\underset{(t-statistic)}{Prcl} = 46.541 + \underset{(3.141)}{12.0964} * Fhpr \tag{3.29}$$

However, during the colonial era, the development of the freehold property rights came at the erosion of non-freehold property rights and political rights and civil liberties. The erosion of non-freehold property rights undermined the process of economic development of the indigenous agricultural sector while promoting that of the European settlers(Sorrenson, 1968). The results in equation (3.26) and (3.28), verify Acemoglu and Robinson (2012)'s assertion that political institutions cause economic institutions. This claim is found to hold for the African country under study. It is however, noted from equation (3.27) and (3.29), that there is the possibility for economic institutions to cause political institutions. This possibility is in line with the claim by Friedman and Friedman (2002) that the two institutions are mutually reinforcing. In their view, an expansion of political rights-more "democracy"fosters economic rights which in turn tend to stimulate demand for more political rights and civil liberties and in the process promote economic growth.

3.4.3 Institutions and Economic Development-Causality Revelations from Alternative Proxies

The third issue addressed is whether the direction of causality between institutions and measures of economic development runs from institutions to economic development or vice versa? In addressing this issue, we use a dataset for the post-independent period because of the paucity of

dataseton macroeconomic variables before independence. The study again starts by investigating the Time Series properties of the variables at hand and the cointegration test is performed between them using the ARDL cointegration technique discussed earlier. The purpose of testing for stationarity before running any regression is to avoid spurious regressions. The cointegration analysis is a preliminary test of causality since the existence of cointegration between two Time Series variables that are individually integrated of the same order, $I(1)$, implies the existence of causality between them at least in one direction (Granger, 1969, 1988). Table (3.1) shows that all the institution variables are non-stationary. This is supported by the standard unit root tests that shows that the DF-GLS computed statistics is lower than the DF-GLS critical value statistics at a 5 percent level of significance, which suggests that all the variables are integrated of order one. This implies that the hypothesis of unit root cannot be rejected at this level of significance hence our variables are non-stationary. In addition, we test real GDP per capita and real GDP per capita growth for stationarity and find the former is found to be non stationary hence integrated of order one, $I(1)$ while the latter is stationary, hence integrated of order zero, $I(0)$. The results of this test are presented in Table (3.6). The Table shows that unit root test statistic for *RGDPPC* is lower than the DF-GLS critical value statistics at 5 percent level of significance. Hence we cannot reject the hypothesis that *RGDPPC* has unit root. However the first difference of *RGDPPC* is stationary as shown by the DF-GLS that is greater than the DF-GLS critical values at a 5 percent level of significance. This implies we reject the hypothesis of unit root for the first difference of *RGDPPC*. At the same time the unit root test for real growth rate ($RGDPg$) shows that DF-GLS computed statistics is greater than the DF-GLS critical values at a 5 percent level of significance hence the rejection of the hypothesis for unit root for *RGDPg*.

Table 3.6: Results for Unit Root Tests

		DF-GLS		Ng-Perron				
Variable	Lag p	DF-GLS	DF-GLS	MZ_{α}^{GLS}	MZ_{T}^{GLS}	MSB^{GLS}	MP_{T}^{GLS}	Inference
		Z	ΔZ		ΔZ			
RGDPPC	1	-0.53	-3.59^{***}	-16.13	-2.77	0.17	1.76	$I(1)$
RGDPg	1	-3.29^{***}	...	...	...	...	...	$I(0)$

Notes: Asterisks ***, ** and * indicate significance levels at 1%, 5% and 10% level of significance respectively
Δ= first difference. Variables are as defined in Table 2.7
The DF-GLS critical statistics are -2.59, -1.94 and -1.61 at 1%, 5% and 10% level of significance respectively.
Ng-Perron critical values at 1% level of significance are -13.8; -2.58; 0.174 and 1.78,
while at 5% are: –8.10; -1.98; 0. 23 and 3.17 for MZ, MZt, MSB, and MPT respectively.
Ng-Perron critical values at 10% are: –5.70; -1.62; 0.275 and 4.45 for MZ_{α},MZ_{t}^{GLS}, $MSB^{GLS}$and MP_{T}^{GLS}

Having tested the stationarity of variables, a test is carried out for cointegration between the institutional variables and real GDP per capita and real GDP per capita growth . The results of these tests are presented in Table(3.7). The results based on a bounds test show the existence of a long-run relationship (cointegration) between our institutional indicators and measures of economic development. Since the estimated F-statistics (i.e. 6.28; 7.89 and 5.87) in the three cases tested fall above the 5% critical values provided by Narayan (2005) for a sample size between 40 and 80 , the null-hypothesis of “No cointegration” between variables of interest is rejected. It is concluded therefore that there is cointegration between the variables and hence causality runs in at-least one direction. Therefore the claim that institutions have affected the process of economic development in Kenya cannot be rejected. The next step is to formally test for this direction of causality between variables. The results for the causality between institutional variables and economic development indicators are presented in Table(3.8).

Causality Results

Do Institutions drive Economic Development in Kenya? To address this question, further investigation relies on the causality methods that are discussed in the previous section. Table (3.8)

Table 3.7: *The ARDL Cointegration test results and the Longrun-Relationship between Institutions and Economic Development (1960-2010)*

Panel A: The Cointegration Results

Variables in the regression	Null hypothesis	Alternative hypothesis	5% Bounds Critical Values		Estimated F-Statistics	Inference
			Value of the StatisticsF_L	value of statistics-F_U		
$rGDPg$ and $lnfhpr$	$H_0 : \varphi_1 = \varphi_2 = 0$	$H_1 : \varphi_1 \neq \varphi_2 \neq 0$	3.937	4.523	6.28	Reject the Null hypothesis
$rGDPg$ and $lnnfhpr$	$H_0 : \varphi_1 = \varphi_2 = 0$	$H_1 : \varphi_1 \neq \varphi_2 \neq 0$	3.937	4.523	7.89	Reject the Null hypothesis
$rGDPg$ and $lnprcl$	$H_0 : \varphi_1 = \varphi_2 = 0$	$H_1 : \varphi_1 \neq \varphi_2 \neq 0$	3.937	4.523	5.87	Reject the Null hypothesis

Notes: Although we use 5% critical values in our test, the 1% and 10% bounds critical values fromNarayan (2005) are $F_U = 6.333, F_L = 5.593$ and $F_U = 3.730, F_L = 3.210$ respectively

Panel B: The Long-run Relationship

Dependent Variable	rGDPg	rGDPg	rGDPg
Constant	6.05	32.38	2.315
$lnfhpr_{t-1}$	0.206^{***}	...	...
	(0.073)	...	...
$lnnfhpr_{t-1}$	...	9.74^{***}	...
	...	(4.06)	...
$lnprcl_{t-1}$	...	...	1.82
			(2.28)

*Notes: ***, ** and * indicates 1%, 5%, and 10% level of significance respectively*

The figures in parentheses are the standard errors.

presents the results of causality between measures of institutions and economic development indicators. The Table shows that there is at-least uni-directional long-run causality between freehold property rights and real economic growth in Kenya. The significance of the error term indicates that this long-run causality runs from freehold property rights to economic growth but not vice-versa. The deviations from the long-run equilibrium between freehold property rights and economic growth are corrected by more than 100 percent in the short-run. The significance of the Wald-test statistics further supports the rejection of the null-hypothesis that the coefficients values of the lags of the freehold property rights variable are equal to zero. This further supports the hypothesis of the long-run causality running from freehold property rights to economic growth in Kenya. This implies that improvement in the status of freehold property rights is likely to lead to investment hence economic growth in the long-run in the country. The research also finds the long-run uni-directional causality running from the non-freehold property rights to real economic growth. The significance of both the error term and the Wald statistics when real economic growth is explained by non-freehold property rights institutions indicates that there is causality running from non-freehold property rights to economic growth in the country. Similarly, long-run causality is found to run from political rights and civil liberties to real economic growth. However the association between political rights and civil liberties, and economic growth is not robust as it fails to satisfy the robustness checks based on the level series. Nonetheless, these results support the findings from Fedderke and Klitgaard (2013) that institutions in the form of rights have an influence on output across a number of countries and this association differs from country to country. The results also support the institution-development hypothesis that institutions drive the process of economic development. These findings carry important implications in that securely anchored political rights on average are likely to render more specific freedoms such as property rights more credible, and hence effectively drive economic growth. The findings imply further that under best rights dispensations, there are significance efficiency gains to be made that could drive the process of economic growth and development.

Table 3.8: Test results for Bivariate Causality between Institutions and Economic Development

Variables	The Long-run Causality Test based on the Differenced Series (ECM-test)				Inference	Long-run Causality Based on Level Series			Inference
	Null hypothesis	Alternative hypothesis	ECM_{t-1}	P-value ECM_{t-1}		Null hypothesis	Alternative hypothesis	$\frac{Wald-test}{(P-value)}$	
$rgdpg$ *and* $lnfhpr$	$H_0 : \delta_1 = 0$	$H_1 : \delta_1 \neq 0$	-1.13^{***}	0.0002	$(lnfhpr \Rightarrow rgdpg)$	$H_0 : \theta_{11} = \theta_{12} = 0$	$H_1 : \theta_{11} \neq \theta_{12} \neq 0$	14.94^{***} (0.000)	$(lnfhpr \Rightarrow rgdpg)$
$lnfhpr$ *and* $rgdpg$	$H_0 : \Phi = 0$	$H_1 : \Phi \neq 0$	-0.007	0.38	$(rgdpg \nRightarrow lnfhpr)$	$H_0 : \theta_{11} = \theta_{12} = 0$	$H_1 : \theta_{11} \neq \theta_{12} \neq 0$	1.08 (0.584)	$(rgdpg \nRightarrow lnfhpr)$
$rgdpg$ *and* $lnnfhpr$	$H_0 : \delta_1 = 0$	$H_1 : \delta_1 \neq 0$	-1.10^{***}	0.004	$(lnnfhpr \Rightarrow rgdpg)$	$H_0 : \theta_{11} = \theta_{12} = 0$	$H_1 : \theta_{11} \neq \theta_{12} \neq 0$	6.11^{**} (0.047)	$(lnfhpr \Rightarrow rgdpg)$
$lnnfhpr$ *and* $rgdpg$	$H_0 : \Phi = 0$	$H_1 : \Phi \neq 0$	-0.005	0.154	$(rgdpg \nRightarrow lnfhpr)$	$H_0 : \theta_{11} = \theta_{12} = 0$	$H_1 : \theta_{11} \neq \theta_{12} \neq 0$	2.12 (0.34)	$(rgdpg \nRightarrow lnfhpr)$
$rgdpg$ *and* $lnprcl$	$H_0 : \delta_1 = 0$	$H_1 : \delta_1 \neq 0$	-0.85^{***}	0.001	$(lnprcl \Rightarrow rgdpg)$	$H_0 : \theta_{11} = \theta_{12} = 0$	$H_1 : \theta_{11} \neq \theta_{12} \neq 0$	1.089 (0.58)	$(lnprcl \nRightarrow rgdpg)$
$lnprcl$ *and* $rgdpg$	$H_0 : \Phi = 0$	$H_1 : \Phi \neq 0$	-0.008	0.376	$(rgdpg \nRightarrow lnprcl)$	$H_0 : \theta_{11} = \theta_{12} = 0$	$H_1 : \theta_{11} \neq \theta_{12} \neq 0$	2.425 (0.30)	$(rgdpg \nRightarrow lnprcl)$

The first variable in the square brackets under the column titled “variables” is the dependent variable while the other is the independent variable.

3.5 Summary and Conclusion

This Chapter has provided the first application of the newly constructed indicators computed in the previous Chapter. The research first tested the theoretical assumption that institutions are persistent. The results from this test show that institutions are time variant: The property that implies institutions are indeed path dependent or persistent. This result validates this commonly held theoretical assumption which is often used when modeling institutions in institution-development debates. Second, causality between different types of institutions-political institutions and economic institutions was tested. The results from this test show the presence of long run causality between political institutions measured by political rights and civil liberties $(prcl)$ and economic institutions measured by freehold property rights$(fhpr)$ during the post independence period. This unidirectional causality runs from political institutions $(prcl)$ to economic institutions $(fhpr)$. This result lends support to the hypothesis by Acemoglu and Robinson (2012) that political institutions cause economic institutions, which in turn cause long-term growth and development. When economic institutions are measured through non-freehold property rights, we find strong evidence of bidirectional causality between non-freehold property rights and political institutions proxied by political rights and civil liberties. This evidence shows that political institutions $(prcl)$ drive the non-freehold economic institutions $(nfhpr)$ and the latter in turn drives political institutions in Kenya. The relationship between political institutions and non-freehold rights has not been a subject of discussion in the literature since measuring non-freehold property rights has been difficult in empirical work. When the test of causality is performed on the full sample (1884-2010), weak causality is found running from economic institutions to political institutions. However this weak reverse causality does not pass robustness checks using the model with variables in their level form. Although this result appears contrary to the claim by Acemoglu and Robinson (2012) that it is political institutions that cause economic institutions, the large sample size used in this study might have distorted the results due to the presence of structural breaks although these were controlled for. These results have strong implications for the analysis of the relationship between economic institutions and political institutions, and on whether countries that reform their eco-

nomic institutions first are more likely to experience economic growth dividends than those that reform their political institutions first. The results presented in this chapter show the possibility that the reverse causality could hold hence the economic literature and institutional reformists need to be cautious and consider all different possible associations before recommending any policy reform. On the basis of the results from this paper, this thesis argues that the poor economic development path in Kenya is a result of the continuation of colonial structures in the post colonial state by the ruling elites.

APPENDIX TO CHAPTER 3

APPENDIX B

The VECM and Johansen Procedure for Testing for Cointegration

The Johansen system procedure is based on a Vector Error Correction model (VECM) derived from the following Vector Autogressive (VAR) model, say of order p:

$$Z_t = A_1 Z_{t-1} + A_2 Z_{t-2} + ... + A_p Z_{t-p} + \mu + u_t \tag{3.30}$$

where Z_t is a vector of n variables (institutional and economic variables), A_is (with $i = 1, ..., p$) denote a set of p vectors of n parameters each, μ denotes deterministic elements, and u_t represents an $n \times 1$ vector of standard normal white noise errors. For all variables that are integrated of order 1, the model is specified as a vector error-correction model (VECM) to avoid spurious correlations:

$$\Delta Z_t = \Pi Z_{t-1} + \sum_{i=1}^{p-1} \Gamma_i \Delta Z_{t-i} + \mu + u_t \tag{3.31}$$

where the $n \times n$ matrices $\Pi = \sum_{i=1}^{p} A_i - I$ and $\Gamma_i = -\sum_{j=i+1}^{p} A_j$. If the coefficient matrix Π has reduced rank r such that $0 < r < n$, then there exist two $n \times r$ matrices α and β with $\text{Rank}(\alpha) = \text{Rank}(\beta) = r$ such that $\Pi = \alpha\beta'$ and the vector $\beta' Z_{t-1}$ is stationary. In such a case, there are r cointegrating relationships. The vector $\beta' Z_{t-1}$ characterizes the long run equilibrium, while matrix α can be interpreted as the speed of adjustment towards the long run equilibrium. The matrix of parameters Γ_i reflects the short run dynamics.

To determine the number of cointegrating relationships, Johansen (1991) proposes two likelihood ratio tests: *(i)* the trace test which tests the null hypothesis of r cointegrating vectors against the alternative hypothesis of n cointegrating vectors, and *(ii)* the maximum eigenvalue test which, on the other hand, tests the null hypothesis of r cointegrating vectors against the alternative hypothesis of $r + 1$ cointegrating vectors.

Table 3.9: Cointegrating Vectors: Long-run Relationships Among Institutional Indices

Cointegration Vector	post colonial period			colonial period
	1	2		3
FhPR	1.00	1.00	-2.3***	0.39
	...		[1.06]	[0.20]
NFhPR	-1.17***	-0.33***	-1.97***	1.00
	[0.13]	[0.14]	[0.42]	—
PrCL	..	(rest)	1.00	
		(0.00)		
ECM1	-0.10***	-0.02***	-0.05	-0.04***
	[0.006]	[0.0018]	[0.004]	[0.02]
ECM2		-0.03***	-0.09**	
		[0.005]	[0.007]	

ECM-error correction term; Variables are defined in Table 2.7.

***p<1%, **p<5% and *p<10%; p-value in parenthesis ( ) and standard errors in square brackets [ ]

Table 3.10: Tests results for Stationarity

		DF-GLS		Ng-Perron				
Variable	Lag p	DF-GLS	DF-GLS	MZ_{α}^{GLS}	MZ_{T}^{GLS}	MSB^{GLS}	MP_{T}^{GLS}	Inference
		Z	ΔZ			ΔZ		
$RGDPpc$	1	-0.53	-3.59^{***}	-16.13	-2.77	0.17	1.76	$I(1)$
$prcl$	2	-0.73	-5.30	-23.13	-3.30	0.14	1.37	$I(1)$
$nfhpr$	2	-0.89	-6.64^{***}	-23.47	-3.47	0.14	1.09	$I(1)$
$fhpr$	2	-1.07	-6.82^{***}	-24.49	-3.46	0.14	1.11	$I(1)$
PoI	1	-1.27	-13.30^{***}	-16.13	-2.79	0.17	1.69	$I(1)$

Asterisks ***, ** and * indicate significance levels at 1%, 5% and 10% level of significance respectively

Δ= first difference. Variables are defined in Table 2.7

The DF-GLS critical statistics are -2.59, -1.94 and -1.61 at 1%, 5% and 10% level of significance respectively.

Ng-Perron critical values at 1% level of significance are -13.8; -2.58; 0.174 and 1.78,

while at 5% are: –8.10; -1.98; 0. 23 and 3.17 for MZ, MZt, MSB, and MPT respectively.

Ng-Perron critical values at 10% are: –5.70; -1.62; 0.275 and 4.45 for MZ_{α},MZ_{t}^{GLS}, $MSB^{GLS}$and MP_{T}^{GLS}

Table 3.11: Test results for Long-run Causality between Institutions and Economic Development

Variables	The Long-run Causality Test based on the Differenced Series (ECM-test)				Inference	Long-run Causality Based on Level Series			Inference
	Null hypothesis	Alternative hypothesis	ECM_{t-1}	P-value ECM_{t-1}		Null hypothesis	Alternative hypothesis	$\frac{Wald-test}{\chi 2-Statistics}$ $(P-value)$	
$[rgdpg\ and\ lnfhpr]$	$H_0:\delta_1=0$	$H_1:\delta_1\neq 0$	-1.1305^{***}	0.0002	$(\Delta lnfhpr \Rightarrow \Delta rgdpg)$	$H_0:\theta_{11}=\theta_{12}=0$	$H_1:\theta_{11}\neq\theta_{12}\neq 0$	14.94^{***} (0.000)	$(lnfhpr \Rightarrow rgdpg)$
$[lnfhpr\ and\ rgdpg\ ]$	$H_0:\Phi=0$	$H_1:\Phi\neq 0$	-0.0068	0.376	$(\Delta rgdpg \nRightarrow \Delta lnfhpr)$	$H_0:\theta_{11}=\theta_{12}=0$	$H_1:\theta_{11}\neq\theta_{12}\neq 0$	1.08 (0.584)	$(rgdpg \nRightarrow lnfhpr)$
$[rgdpg\ and\ lnnfhpr]$	$H_0:\delta_1=0$	$H_1:\delta_1\neq 0$	-1.1000^{***}	0.0004	$(\Delta nnfhpr \Rightarrow \Delta rgdpg)$	$H_0:\theta_{11}=\theta_{12}=0$	$H_1:\theta_{11}\neq\theta_{12}\neq 0$	6.11^{**} (0.047)	$(lnfhpr \Rightarrow rgdpg)$
$[lnnfhpr\ and\ rgdpg]$	$H_0:\Phi=0$	$H_1:\Phi\neq 0$	-0.005	0.1540	$(\Delta rgdpg \nRightarrow \Delta lnfhpr)$	$H_0:\theta_{11}=\theta_{12}=0$	$H_1:\theta_{11}\neq\theta_{12}\neq 0$	2.12 (0.34)	$(rgdpg \nRightarrow lnfhpr)$
$[rgdpg\ and\ lnprcl]$	$H_0:\delta_1=0$	$H_1:\delta_1\neq 0$	-0.8499^{***}	0.0013	$(\Delta lnprcl \Rightarrow \Delta rgdpg)$	$H_0:\theta_{11}=\theta_{12}=0$	$H_1:\theta_{11}\neq\theta_{12}\neq 0$	1.089 (0.58)	$(lnprcl \Rightarrow rgdpg)$
$[lnprcl\ and\ rgdpg]$	$H_0:\Phi=0$	$H_1:\Phi\neq 0$	-0.0068	0.376	$(\Delta rgdpg \nRightarrow \Delta lnprcl)$	$H_0:\theta_{11}=\theta_{12}=0$	$H_1:\theta_{11}\neq\theta_{12}\neq 0$	2.425 (0.30)	$(rgdpg \nRightarrow lnprcl)$

The first variable in the square brackets under the column titled “variables” is the dependent variable while the other is the independent variable.

Chapter 4

Foreign Direct Investment and Institutions in Kenya: Are Institutions A Binding Constraint?

"We find that institutions are a robust predictor of FDI and that the most significant institutional aspects are linked to property rights."

– Ali A.Fathi et al. (2010)

4.1 Introduction

SINCE the early 1980s, the search for the long-term drivers of economic development has led many African countries to significantly ease restrictions on Foreign Direct Investment (FDI), and to aggressively offer tax incentives and subsidies to attract foreign capital[1]. Despite such incentives, FDI net inflows have at best been disappointing with investment only taking place

[1]The motivation for doing so was their firmly held belief that FDI would promote their economic growth and long-term economic development

in the natural resource endowed economies such as Nigeria, Angola and South Africa. A large number of the other African economies (including Kenya) lost the race for FDI. This raises two obvious interrelated questions: First, why are these developing countries not able to attract FDI? How important is FDI to the process of economic development of these countries?

In response to the first question, the emerging literature by the New Institutional Economists following the seminal works of Douglass North (1993, 1990, 1973,1970) claims that these countries fail to attract FDI due to weaknesses in institutions and/or the lack of their enforcement (Rigobon and Rodrik, 2005; Acemoglu and Johnson, 2003). This literature singles out the protection of property rights, and political institutions in particular, to be the main binding constraints on FDI in developing countries. This literature argues that property rights in developing countries are informally defined and weakly enforced (Stiglitz, 2001; Acemoglu et al., 2001). In the light of these assertions developing countries are advised by bilateral donors and multilateral institutions to get institutions right. That is, to develop and protect private property rights, attain good governance and democratize in much the same way that the triptych of "liberalization, privatization, and stabilization" was the mantra of the 1980s (Xu, 2011; Rodrik, 2008; Stiglitz, 2001). In this context the role of the state is recognized to be to codify and protect such rights. This is regarded as an essential precondition for economic development. African countries in particular are advised to undertake market-oriented reforms. They are told that such reforms should focus mainly on institution building (Stiglitz, 2001). The proposed market-oriented reforms are seen as ultimate solutions to the African economic problems because they provide the incentive structure for foreign investors to channel their capital into these countries[2].

However, the evidence in support of the influence of property rights on investment is often based on either cross country analyses or analyses of a panel of countries outside Africa (see Saleh, 2004, for summary evidence). Rodrik (2008) notes that such evidence is uninformative because it ignores the influence of institutions (property rights) at a country level despite the recognition that developing countries are different from the advanced economies. He further argues that

[2] These issues are particularly considered pressing given the relatively poor performance and lack of development financing in Africa.

because countries are heterogeneous, the kind of institutions that work in one country might not necessarily work in another and developing countries might need “appropriate” institutions. By “appropriate institutions” reference is made here to those institutions that are country and context specific. Thus the quality of institutions in one country cannot be regarded a prototype model for other countries to emulate. In addition, Rodrik (2007:15) argues that while competitiveness-enhancing institutions have the same functions across economies-namely, the protection of private property-their form is context specific, and history dependent. In the light of Rodrik’s arguments, an exploration of the influence of property rights institutions on economic outcomes at the country specific level is warranted. Chang (2011) endorses this argument. The country case studies will validate or refute generalized suppositions on the influence of property rights on investment. Some countries in Africa, such as Angola, Tanzania and Nigeria have received more foreign investment than others in recent times, despite their similarity of their property rights institutions. This provides further justification for country specific case studies that may help explain these differences in FDI flows.

It is against this backdrop that this chapter addresses the two basic questions posed at its opening. In particular, it assesses the validity of the claim that the property rights institutions are a binding constraint to FDI. Kenya is used as a case study for this exercise. The section also addresses the question of how important FDI is to Kenya’s economic development. The focus is on FDI rather than other forms of capital because it is claimed to involve long term commitment, and may have far reaching effects on the growth of host nations due to technology spillover and innovation (Dunning, 2001; Barrell and Holland, 2000)[3].

For a number of reasons Kenya provides a unique opportunity to evaluate the influence of property rights institutions on FDI. First, Kenya was a settler economy which, according to Acemoglu, Johnson and Robinson (2001) should possess benign institutions that protect private property because, in colonies where colonisers settled, they both demanded and helped construct inclusive institutions. Yet, despite its legacy as a settler colony and the adoption of macroeconomic policy

[3]FDI is also considered less prone to crises as opposed to short term credit and portfolio investment, because direct investors, in general, have a long term perspective when investing in a host country Lipsey (1999).

reforms and incentives to stimulate FDI, the Kenyan economy continues to face a disappointing record of FDI net inflows. The failure of Kenya to attract FDI raises the policy question of whether strengthening property rights institutions will reverse the poor performance of FDI, and place the economy on a sustainable path to development. This paper therefore set out to explore this important research question.

The questions raised in this paper are of great importance not only for Kenya but for other African countries which still have a disappointing record of foreign direct investment and economic development. Indeed the level of investment in African economies in general remains well below that of the fast growing economies of Asia and Latin America. The low level of investment raises an obvious possibility of augmenting domestic investment with foreign investment. This has been clearly reflected in a number of policy documents across a number of African economies. For instance, Kenya's vision 2030-the country's strategic document that outlines its ambitions for its developmental path, stresses the need to enlist foreign capital flows in support of this vision[4]. The impetus to enlist foreign capital stems from the fact that most fast growing economies such as those of South Korea and Singapore, had their investment to GDP ratio well above 30 percent during their growth episodes. Second, the low productivity levels in Kenya and other African countries have given increased importance to the potential of technology and skills transfer as a spill-over advantage of FDI.

Prospects for increased capital flows are linked to the ability of a country to create a conducive environment for such investment and reduce uncertainty that perhaps affects investor's decisions. It is therefore imperative to provide evidence that can guide policy formulation and the process of institutional reforms based on an assessment of whether FDI responds to institutional factors in Kenya. This is more important in relation to this economy which has often been written off as riddled with conflict, corruption and weak institutional environments in general.

The results from this paper show that foreign direct investment is highly responsive to the quality

[4]This document proposes 10 percent economic growth per year that will place the economy on a middle income level and such growth is believed will come through enlisting FDI in addition to domestic investment mobilization

of institutions in Kenya, to an extent that a unit percentage change in the quality of institutions leads to more than one unit percentage response in FDI. Thus, an improvement (or deterioration) in institutional quality has a direct positive (negative) effect on FDI in Kenya. The result further indicates that this relationship is robust to inclusion of other factors which influence FDI. Similarly, the results show that weak macroeconomic policy management (captured by the levels of external debt) negatively affect FDI. Thus, high debt levels reduces incentives of investors to invest in the Kenyan economy. The results further show that political instability negatively affects FDI in Kenya although this effect remains insignificant in the presence of other macroeconomic variables and institutional indicators. In conclusion, the paper argues from this evidence that property rights protection is a significant driver of FDI hence long term income in Kenya. This insight extends the earlier results from cross country regressions and confirms the scope for institutional reforms that might drive long term growth among other African countries.

The contribution to the institutions and economic development literature in this chapter is three-fold. The first contribution is the construction of a theoretical model to demonstrate the link between the quality of property rights institutions and foreign direct investment decisions to invest in a developing country. Second, this study tests empirically the role of property rights institutions with regard to FDI into Kenya. Third, it contributes to this literature by assessing the extent to which FDI leads to the economic development of this economy. This work is related to the recent work on economic development that emphasizes the role of institutions for achieving higher income levels. However, as pointed out by Alfaro et al. (2007), there is little systematic evidence on the specific mechanisms of how institutions affect economic development. The results from this investigation show that property rights institutions affect FDI in Kenya. This in turn implies that foreign investment might be one of the missing links through which institutions affect long-run development in African countries.

The rest of the chapter is organized as follows: The following section provides a historical overview of foreign direct investment , economic policy and institutions in Kenya. Section three provides a brief review of the literature on foreign direct investment and the factors that are iden-

tified to be its main drivers. Section four provides a simple theoretical model of investor decision making under institutional uncertainty. From this is derived the basic proposition that is tested in the section that follows using Time Series data for Kenya for 1970 to 2010. Section five presents an econometric model specification to test the basic proposition from the theoretical model. Section six presents estimation results and a discussion of these results. The final section provides some concluding remarks and discusses policy implications of the findings of the paper.

4.2 Overview of Foreign Direct Investment and Policy Reforms in Kenya

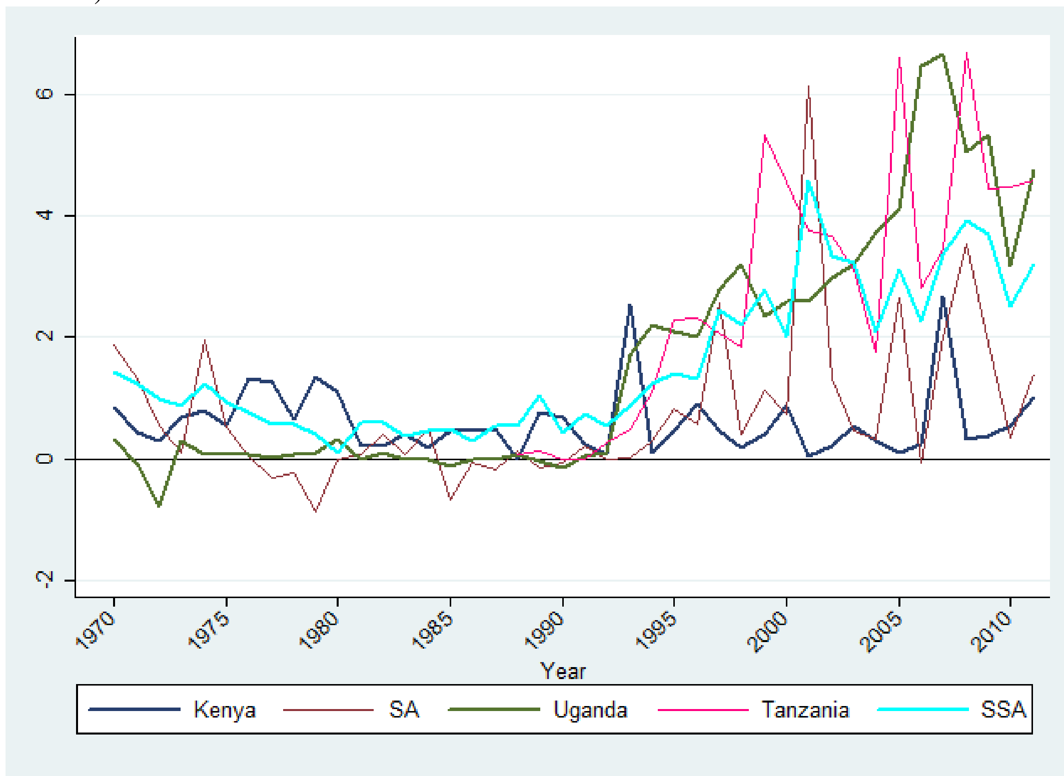
4.2.1 FDI During the Period of Growth Acceleration

Foreign Direct Investment has always been at the centre of the Kenya's industrial and economic development strategy. In the 1960s, just after gaining independence during Kenyatta's administration, Kenya showed its ambitious goals at attracting FDI. This was done through the enactment of the Foreign Direct Investment Act of 1964 that gave foreign investors the right to repatriate their profits, loans and interest on loans and part of proceeds from the sale of assets. This Act was followed by the publication of the "the Sessional Paper No.10 on African Socialism and its Application to Planning in Kenya (Kenya, 1965)", in which the government further strengthened protection of FDI and laid the foundation for a market driven economy. These policy instruments were designed by government to lure foreign investors into the economy to an extent that the economy became the prime choice for foreign investors seeking to set up in both the Eastern and Southern Africa during that period.

As reflected in Figure 4.1, during the 1970s up-to the early 1980s, Kenya had FDI net inflows that were above the inflows of its neighbouring East African Countries and the Sub-Saharan Africa average. The stock of FDI and net inflows into the economy supported an expansionary economic period of more that six percent GDP growth. This rate of growth came mostly from the

manufacturing sector that accounted for about 33 percent of GDP. The growth in manufacturing was propelled by inflows of FDI that went into the heavily protected import-substituting industries. These included manufacturing of footwear, leather, rubber, petroleum, industrial chemicals, paints, soft drinks, cement and metal products (Bigsten and Kimuyu, 2010; Bigsten, 2001). Ikiara and Ndirangu (2003) support the claim made by Bigsten and Kimuyu (2010) but further state that such growth resulted from the dynamism and prudent macro-economic management; increased protectionism and a stable political and economic environment that were attractive to both domestic and foreign investors. Bigsten (2001) acknowledge that, the import substitution ensured domestic availability of products previously imported. He admitted though that it distorted industrial development in Kenya by encouraging the creation of excess capacity, low technical efficiency and subsequent inability to penetrate external markets.

Figure 4.1: Net FDI Inflows to Kenya and the Other Selected African Countries (% of GDP-1970 to 2011)



The import substitution strategy was pursued alongside an expansionary fiscal policy and the

"indigenisation policy" in which the government attempted to transfer ownership of businesses and the economic resources to natives. The results of the "indigenisation policy" became obvious towards the late 1970s when net inflows of FDI started falling. This policy scared away potential foreign investors in the Kenyan economy (Figure 4.1). The sluggish net inflows of FDI coupled with the administrative balance of payment controls worsened the balance of payment crises of the 1970s. Faced with the shortage of foreign exchange in the economy, the government intensified administrative controls by imposing further higher tariffs, stricter import licensing procedures and widespread price controls as a solution to the balance of payment problem.

As crisis after crisis hit the economy, the Kenyan authorities continued to tighten the price controls instead of liberalizing the economy. Ndung'u (2003) notes that the authorities believed at that time that controls were an easier way to deal with the repercussions of expansionary policies and balance of payments crises.These were specifically placed on financial and foreign exchange markets transactions (i.e foreign exchange transactions, ceilings on domestic rates of interest and selective restrictions on bank borrowing) and on trade transactions (i.e. importation and licensing, export taxes, domestic retail and producer prices) and on labour market transactions (i.e. wage guidelines). One of the consequences of these policies was a further decline in FDI net inflows and a drastic reduction in the share of manufacturing exports. These shrank from forty percent (40%) of the value of manufacturing output in 1964 to about 10% in the mid-1980s (Ndung'u and Ngugi, 1999).

4.2.2 FDI During the Period of Stagnation and the Muted Reforms

The period between 1980 and 1990, under president Moi's administration, introduced a number of policy reforms and incentives meant to hasten the recovery of foreign investment in the economy. These reforms were pursued under the Structural Adjustment Programmes based on the Washington consensus ideology that dominated development theory and policy in the 1980s and 1990s. These reforms corrected the structural problems, macroeconomic imbalances as well as market distortions inherited from the two decades of import substitution policies. These reforms

were expected to stimulate investment and economic recovery. The following strategies were introduced as part of the incentives to stimulate investment, the export processing zones characterized by massive tax exemptions for FDI[5], export compensation schemes, a duty/VAT drawback scheme and "Double Taxation Treaties (DTTs)". These treaties exempted foreign investors from paying taxes on dividends, royalties, interest and management fees in both contracting states but set limits on the withholding rate allowed in the country where the income arises[6]. All DTTs allowed for tax credits for tax paid in the partner country. A number of international agreements were also entered into to provide market access for the products from exporting FDI industries in Kenya. These agreements included for instance the Preferential Trade Area (PTA) of Eastern and Southern Africa of 1983, and the Common Market for Eastern and Southern Africa (COMESA) agreement of the same year. Yet the net inflows of FDI did not recover until the 1990s.

In 1994 the economy received a once off inflow of FDI following the privatization of state owned enterprises and the country's return to multiparty democracy in 1992. Moi's administration however did not have credible commitment to implementing the policy reforms. It is perhaps premature to conclude at this stage that policy reforms failed to stimulate investment since the provision of FDI incentives occurred in an economy that was characterized by a fixed exchange rate regime; closed capital account; huge fiscal policy deficits with increasing indebtedness and selective price controls; and loss of monetary policy control as evidenced by rising inflation levels due to excess liquidity. Ndungu' (1993) notes that the market distortions in the Kenyan economy failed to provide efficient signals to either domestic or international economic agents. Thus FDI remained at its low level with fewer inflows coming into the economy throughout the 1980s.

In the early 1990s, the Government of Kenya realized that the reforms that were undertaken did

[5]The tax exemptions covered from exemption from all existing and future taxes and duties payable under the Customs and Excise Act and Value Added Tax Act on all export processing zone imports for use in the eligible business activities of the EPZ enterprise, exemption from registration under the VAT Act, exemption from the payment of income tax for the first 10 years from the date of first sale, followed by a rate of 25 per cent for the subsequent 10 years and the standard rate thereafter, exemption from the payment of withholding tax on dividends and other payments made to non-residents for the first 10 years, exemption from stamp duty, exemption from any quotas or other restrictions or prohibitions on imports or exports, with the exception of trade in firearms, military equipment or other illegal goods (see the Export Processing Zones under the Export Processing Zones Act (1990) and the subsequent Amendments.

[6]These limits are typically higher than what Kenya applies in its general regime, except for management fees.

not succeed in putting the economy on a sustainable path to economic recovery. Net inflows of FDI remained sluggish. In 1993, the government implemented further Neo-liberal reforms. These included a market liberalization and stabilization package supported by the IMF under the umbrella of the Structural Adjustment Programme. This reform package removed most of the administrative controls purporting to protect local industry from competition and consumers from high prices. In 1993, the exchange rate regime was changed from fixed to the crawling peg and finally to a fully flexible regime. Under this regime market exchange rates were determined by market forces. The official and the interbank exchange rates were harmonized. There was also provision for foreign exchange retention accounts in commercial banks. This series of reforms let to the gradual relaxation of exchange controls on foreign exchange transactions and eventually to the full liberalization of the exchange market for commercial transactions.

However, the outcome in the short term was a rise in the rate of inflation and inflationary expectation. Several possible factors accounted for this outcome: excess money supply, a severe shortage of foreign exchange; price decontrol in the presence of inadequate supply of essential commodities; strong rise in consumer demand due to excess liquidity in the economy. This was accompanied by increased spending in the run-up to the 1992 elections (electoral greasing and financial scams at the Central Bank) which further worsened the situation of excess liquidity. In addition, import licenses were removed and import tariffs became the main trade policy instrument. Tariff structures were simplified gradually following the initial reforms in 1993. Despite these measures, FDI net inflows did not recover until the country entered into a privatization programme that saw a once-off inflow of FDI into the privatization projects in 1994 (see Figure 4.1). This once off inflow of FDI was followed by a decade of sluggish FDI.

4.2.3 FDI During the Period of Recovery and the Institutional Reforms

Although Kenya returned to multiparty democracy in 1992, the new institutional reforms for the promotion of FDI started towards the end of 2000 during Kibaki's administration.The following statutes were passed: the Industrial Property Act (2001), the Trade Marks Act, and the Copyright

Act (2001). This set of statutes was meant to govern the allocation and enforcement of property rights and trademarks. Patent protection can be granted for inventions under a traditional patent system for utility models ("inventions" related to shapes, structures or assemblage of articles), industrial designs and innovations (novel and industrially applicable arrangements of possibly traditional components in an assembly that results in a new solution to a technical problem, i.e. mostly production processes).

Further institutional reforms to improve the investment climate were implemented in 2005 following recommendations made by the UNCTAD/JBIC Bluebook Initiative. These reforms included the lifting of compulsory screening of FDI and minimum capital requirement, and reviewing the process of awarding work permits. They also included the introduction of deadlines and penalties for excessive delays in the payment of VAT refunds by the Kenya Revenue Authority (KRA). The reforms introduced guidelines for transactions in agricultural land, and established a performance benchmarking project for the manufacturing sector. Finally, an investor-tracking and aftercare capacities were developed at KIA. These institutional reforms saw an increase in FDI from 2006 which however was undermined by the political upheavals following the 2007 general elections.

On the governance front, the government passed the Public Officer Ethics Act and the Anti-Corruption and Economic Crimes Act in mid-2003. These Acts were meant to control corruption among public officials and to restore investors' confidence in the economy. The passing of these statutes followed decades of corruption and poor governance, and the deterioration of public services that started in the 1980s. The World Bank's survey of investors carried out in 2007 showed that corruption and the poor economic climate were the major impediments to renewed FDI flows to Kenya. Over 38 percent of investors surveyed during that period claimed corruption to be a "major" or "very severe" constraint on their operations. The corruption levels in Kenya were significantly higher than those in the United Republic of Tanzania and Uganda.

In 2010, the country gained a new constitution that guaranteed the property rights of investors. Following the enactment of the constitution, the country has realized some FDI inflows though it still has to be ascertained if such inflows are a result of the change of the governance in the

economy.

Given the history of the macroeconomic policy reforms and corrections of structural problems, and the incentives provided for attracting FDI, it is natural to expect a rise in FDI if this is motivated by macroeconomic factors alone. However, Kenya's level of FDI inflows has remained well below the Sub-Saharan African average and below that of its neighbouring East African countries (see Figure 4.1). For more than a decade, macroeconomic stability by itself did not stimulate FDI inflows.

Despite macroeconomic incentives, over the past three decades, Kenya has received meager FDI inflows and a number of foreign investors have been consolidated out of the economy (UNCTAD, 2005)[7]. Yet, the government continues to defend the provision of tax incentives in the midst of other competing budget priorities on the grounds that FDI will supplement low levels of domestic investment, increase productivity levels in the economy and spur economic growth [8]. The policy related question is whether Kenya should continue to offer tax incentives to attract FDI. Are there not other fundamental structural problems which are barriers to FDI and other investment in general in Kenya that need reforms? In other words, why does Kenya continue to be neglected by foreign investors despite provision of tax incentives? Several conflicting assertions have been advanced to explain low rates of FDI in Kenya. First, deterioration of economic performance coupled with the inconsistent economic policy making and structural problems in the economy have often been cited as the main causal factors for lack of FDI in this economy. Second, deteriorating public services and infrastructure and growing problems with corruption and governance and weak protection of private property rights have been suggested as the main hassle costs/barriers to FDI investment. The latter two factors are claimed to have increased uncertainty and investment risk, and raised the cost of doing business. This has led to lower rates of FDI since the 1980s[9].

[7] In 2005, UNCTAD noted that a range of foreign investors were even consolidating out of Kenya and only a few of them had significant plans for expansion. See Figure 1, Section 2 for net FDI inflows into Kenya.

[8] This thinking is strengthened by the experience of a small number of fast growing newly industrialized East Asian countries and China, which have shown that international capital finance is key to bridging the saving-investment resource gap in low income countries. They have also shown that international capital finance can help avoid further build-up of debt while directly promoting growth and alleviating poverty.

[9] It must be noted that even levels of domestic investment have remained relatively low by international standards.

However, an empirical test for some of these claims, in particular, corruption, poor governance and weak protection of private property rights has proved difficult due to lack of reliable data that cover a long time.

The above claims fits well in current debates on the role of institutions in economic development pioneered by the New Institutional Economics theorists. This thesis postulates that the protection of private property rights and enforcement of laws against the risk of expropriation (strong legal institutions) create incentives for markets to operate. They reduce uncertainty involved in the exchange of goods and services, and therefore spur investment and economic development[10](North, 1987a). Alfaro et al. (2007) using colonial origin as a measure of protection of private property rights (institutional quality) show that protection of property rights has a first order effect over policies in influencing foreign capital flows. They find that changes in policy and changes in institutional quality affect on changes in capital flows. Similarly, Ahlquist (2006) shows that FDI is responsive to political institutions whereas foreign portfolio investment is more sensitive to macro level economic policy outcomes. This line of thinking argues that countries with more stable and democratic political institutions attract more FDI. However this fails to explain why autocratic countries such China and Singapore have been able to attract significant FDI in recently. Edwards (1992) shows that fiscal policy proxied by government size and openness are the most important pull factors of foreign capital flows to developing countries no matter whether or not countries have good institutions.

Garrido et al. (2011) show that Kenya's average investment to GDP between 1960-2008, which registered 18.5 percent, was below the average for other low income countries (20.9 percent).

[10]This argument was first presented by Adam Smith's in the 1770s as quoted above in the opening phrase of this paper. Therefore the New Institutional Economics thesis has modified Adam Smith's postulates and today understanding the impact of risk on investment and how to mitigate such risk has remained the theorist's central focus.

4.3 Review of the Related Literature

4.3.1 Barriers to Foreign Direct Investment in Developing Countries

According to the Neoclassical theory of capital, capital is expected to flow from capital abundant countries to capital scarce countries because the returns to capital are low in capital abundant countries relative to capital scarce countries, provided there are no transaction costs and market frictions [11]. If one considers the Neoclassical model literally with only capital and labour as inputs and identical technologies across countries and allow capital flow freely across borders, then new investment should take place in poorer developing countries (Zebregs, 1998; Alfaro et al., 2007; Ahlquist, 2006). The theory predicts that capital would continue to flow to developing countries until the returns to capital are equalized across all countries. Even though the returns to capital are potentially large in developing countries, in practice, capital has often been observed to flow from poor developing countries to rich countries, and thereby giving rise to a capital flow puzzle[12]. This puzzle shows that the Neoclassical theory of capital does not adequately explain the distribution of foreign direct investment to developing countries. To explain this puzzle, Lucas (1990) first argues that the lack of foreign capital flows to many developing countries despite their potentially higher marginal returns to capital is due to the higher political risk that characterizes many of these countries. According to Lucas, the domestic political climate of the country is very important in attracting foreign capital.

Following Lucas' work, many theoretical and empirical explanations have been advanced to explain why capital does not flow to developing countries. The theoretical explanations could be grouped into two broad theoretical groupingsAlfaro et al. (2007). The first explains the lack of foreign investment in developing countries is a result of the differences in *economic fundamentals*

[11] Note that this is predicted to happen under the usual assumptions of a 2x2x2 general equilibrium framework with two countries (home and foreign), two factors of production (usually capital and labour) and two goods produced with the same constant returns to scale production technology, zero transport costs, and commodities, which differ in relative factor endowments, leading to international factor price differential.

[12] This puzzle was first noted by Lucas (1990). He compared the U.S.A and India in 1988 and demonstrated that, if the neoclassical model predictions were true, the marginal product of capital in India should be about 58 times that of the U.S.A. In the face of such a return differential, all capital should flow from U.S.A to India but in practice, such flows are not observed, rather capital flows from India to the USA.

that affect the production structure of the economy, such as technological differences, missing factors of production, government policies and the institutional structure of the economy. The second theory focuses on international capital market imperfections, mainly sovereign risk and asymmetric information. The proponents of this theory argue that capital market imperfections such as sovereign risk leads to market failure. Sovereign risk in this context is understood as a situation where the sovereign defaults on the loan contract with foreign firms, seizes foreign assets located within its borders or prevents domestic residents from fully meeting their obligations to foreign contracts. Alfaro et al. (2005) argue that the problem of sovereign risk stems from the fact that repayment incentives for debtors might differ from what is in a contract between two nations because the ability of courts to enforce a sovereign entity is extremely limited. To corroborate this argument, Reinhart and Kenneth (2004) argue that because so many poor countries are in default on their debts, few funds are channeled through equity, and that private lending rises more than proportionately to wealth. This supports the view that political risk is the main reason for lack of foreign investment in developing countries.

Microeconomic explanations for lack of FDI in developing countries include the proximity-concentration theory of horizontal FDI[13] (see Markusen, 1984; Brainard, 1997; Helpman et al., 2004) and the comparative advantage theory of vertical FDI[14] (see Helpman, 1984) view the structure of fixed costs, relative country size, factor endowments and preferences of firms to be the leading explanation why foreign firms do not expand their operations aboard[15]. The proximity-concentration FDI theory states that, to serve a foreign market with similar products to the home market, firms will choose to export their products when plant-level economies of scale (concentration of production) are high. They will select FDI (proximity to consumers) when transport costs and/or firm-level economies of scale are high. The traditional proximity-concentration model predicts that, after controlling for proximity-concentration factors (such as plant-level and firm-level fixed costs, transport costs, market sizes), FDI (relative to export) should be more prevalent in

[13]Horizontal FDI occurs when multinational companies (MNCs) have headquarters at home and production plants both at home and abroad that produce the same goods(Helpman et al., 2004).

[14]Vertical FDI occurs when MNCs fragment different stages of production by having headquarters at home and production plants in different foreign countries that produce different intermediate goods (Helpman et al., 2004).

[15]See surveys about the empirical evidences on FDI in Markusen and Maskus (2003) and Yeaple (2003).

less developed countries because of low labour costs in these countries. Contrary to this prediction, in reality, after controlling for the proximity-concentration factors, a firm's ratio of foreign affiliate sales to export sales decreases in the gap of GDP per capita between the foreign and the host country concerned (Brainard, 1997). Also, the bulk of the world FDI is from developed countries to only those host countries with similar per capita incomes (Markusen and Maskus, 2002). Helpman-Krugman (2000) developed a model of relative factor endowments of multinational enterprises (MNEs) to account for this country-level challenge by explaining that countries of similar income levels are countries of similar endowments. However, this relative endowments statement is challenged by another stylized fact. There is little evidence that FDI is related to differences in capital endowments or in the general return to capital across countries. This questions the power of relative factor endowments in explaining horizontal FDI and means there must be some other mechanism(s) at work that drive inflows of FDI (Markusen and Maskus, 2001) and (Markusen and Maskus, 2002).

The comparative advantage vertical FDI theory postulates that firms could fragment the production process into stages with different factor intensities, and locate different stages in different countries according to their relative factor endowments. However, empirical evidence suggests that the bulk of world FDI is horizontal and the proximity-concentration trade-off is far more important than the comparative advantage story in explaining world FDI (Carr et al., 2001) and (Brainard, 1997).

FDI, Institutions and the Risk of Expropriation

According to Azzimonti and Sarte (2007) one of the main deterrents of FDI in developing countries is the risk of expropriation. These authors argue that FDI is vulnerable to the risk of expropriation because once investment has been made, a foreign investor cannot prevent the government of the host country from changing the environment in which the investment was made. Therefore analysis centered around the protection of private property rights to mitigate the risk of appropriation has become central to the new institutional economics. This school of thought argues

that the quality of institutions in the host country, and in particular, the degree of protection of property rights, is key in determining the level of risk and expected returns to foreign investors when they make investment decisions in non-domicile locations. This explanations implies that the concentration of FDI among developed countries is a result of better quality institutions and the level of economic development. By contrast, low levels of FDI in many developing countries are due to poor legal protection of assets. Azzimonti and Sarte (2007) argue that countries, which lack legal protection of assets are also characterized by high levels of political instability and high rates of expropriation and this makes them less attractive to foreign investors.

Thus, the impact of the quality of institutions on foreign investment can therefore be negative or positive depending on whether there are strong institutions or weak institutions. If protection of property rights is weak, (weak institutions) as is often the case in developing countries, one would expect a negative relationship between the quality of institutions and foreign investment because weak institutions act as a tax by increasing the cost of doing business in such countries. Imperfect enforcement of contracts might also increase uncertainty regarding future returns and thus have negative impact on the level of investment. Whereas, in situations where the quality of institutions (protection of property rights) is high, one would expect a positive relationship between this and foreign investment. The institutions-based explanation of FDI is grounded in an influential study by North (1990) which raises awareness of the role of institutions in establishing incentives for economic activity in general and for investment in particular. Foreign investors have therefore come to place greater emphasis on institutional quality when selecting an investment location (see Bevan et al. 2004). However, empirical findings on the role of institutions in determining capital flows remain inconclusive (Seyoum, 2009).

4.4 The Model

Is the quality of institutions a binding constraint on FDI in Kenya? The lack of protection of private property rights is identified as a prime factor behind Kenya's failure to attract FDI despite the

macroeconomic policy reforms and foreign investment incentives that the country has provided to lure FDI(R.W., 2010). In this section, we first construct a simple model of investment under institutional uncertainty within the real option framework following Gries et al. (2012) to illustrate the possible link between the quality of institutions and foreign direct investment.[16] This model serves as a theoretical basis on which, to measure the results on the influence of institutions on foreign investment in Kenya.

To begin with, the study typically assumes that FDI has three important characteristics. First, that investment is partially or completely irreversible in that the capital costs are totally or partially sunk. Second, that there is always uncertainty over future returns accruing to the foreign firms from investment made in a foreign country. In this set-up, this uncertainty is assumed to be principally due to the quality of institutions which could take the form of direct or indirect expropriation, bribery, forced sale based on valuations perceived as unfairly low, or *ex post* restrictions of profits repatriation. Third, that the timing of investment is flexible and investors can invest in their own time. They can invest immediately if they think returns from investment are high enough to cover all investment risks or they can postpone investing to get better information about the quality of institutions in the foreign economy. They may not invest until major uncertainty in the future is cleared. In other words, investors have an option not an obligation to invest abroad at any period in time. They also have the flexibility to abandon, expand, control, extend and shorten the operations of their investment even after investment has been made.

Now consider a representative foreign firm contemplating the possibility of investing in a developing country (*a host country such as Kenya).* Assume the firm is risk neutral and may undertake a risky investment project in the context of low quality institutions in the host country. The investment is considered risky because of uncertainty about future returns on investment. For my purpose, institutions may be poor because the government in the host country is unable to credibly commit to a future course of action on improvement of institutions and their enforcement. In making its investment decision, the representative firm will take into account both uncertainty in

[16]Specifically, we modify the model developed by Gries et al. (2012) to fit our context. The purpose of their model was to explain how firm's investment decisions are shaped by uncertain tax policy in the context of real options analysis.

returns and institutional quality, and will time its investment decision to maximize the expected present value of future returns net of investment costs given by:

$$W = \int_0^\infty [\pi(P_t q_t) - C(I)]\, e^{-rt} \tag{4.1}$$

where P_t is the firm's future returns from investment per unit of output at the unknown future period in time t, at which the investment decision is made; q_t is the output level at time t; $C(I)$ represents the initial cost of investment (initial outlay) which includes sunk costs and is constant, and r denotes the discount rate. The profit function $\pi(.)$ is a function of stochastic process P and time t where $\pi \equiv \pi(P,t)$. It is further assumed that returns from investment (P_t) vary over time and follow a geometric Brownian motion with a drift:

$$dP = \alpha P dt + \sigma P dz \tag{4.2}$$

where α and σ represent the constant drift which measures the deterministic growth in the returns from investment and the constant volatility in returns respectively; dz denotes the random increment of a standard Wiener process with $dz = \varepsilon_t \sqrt{dt}$. Furthermore ε_t follows a standard normal distribution with mean zero and variance equal to one and is serially uncorrelated (that is $\mathbb{E}(\varepsilon_i \varepsilon_j) = 0, \forall i, j$ and $i \neq j$).[17]

It further assumes that institutional quality directly affects the returns from this risky project in the form of expropriation which could for instance come as bribes paid by foreign firms to government officials in the host country. The parameter ϕ is interpreted as an indicator of the quality of institutions (governance) and assumes values in the interval $[0,1]$. The government has a policy handle over ϕ but the parameter is assumed exogenous to the investor. The host country has strong and robust institutions when ϕ equals the lower bound zero and is able to commit to

[17] A Weiner process (also known as Brownian motion) is a continuous time Markov stochastic process whose increments are independent, no matter how small the time interval is. Specifically, if z_t is a Weiner process, then any change in z, Δz, corresponding to a time interval Δt is given by $\Delta z = \varepsilon_t \sqrt{\Delta t}$, where ε_t is a normally distributed random variable with mean zero and a standard deviation of one.

their enforcement. In contrast, the host country has extremely poor institutions when ϕ takes the value of one. As a result, the firm's returns P_ϕ is defined as:

$$P_\phi = \begin{cases} (1-\phi)P & \text{if } 0 < \phi < 1 \\ P & \text{if } \phi = 0 \\ 0 & \text{if } \phi = 1 \end{cases} \tag{4.3}$$

With no loss of generality and for the tractability of the problem, we assume that the firm can produce one unit of output flow forever with no variable costs of production such that, $E(P_t) = P_\phi e^{\alpha t} = (1-\phi)Pe^{\alpha t}$. Once the project is realized, the value, $V(P)$ of the investment is given by:

$$V(P) = \int_0^\infty (1-\phi)Pe^{\alpha t}e^{-rt}dt = \frac{(1-\phi)P}{r-\alpha} \tag{4.4}$$

where $r-\alpha \equiv \delta > 0$. I define the risk adjusted rate of return to be $r = \delta + \alpha$.

4.4.1 Characterising the Equilibrium Solution under Conditions of Institutional Certainty ($\phi = 0$)

In order to highlight the importance of the quality of institutions on FDI, I first characterize a baseline results describing the firm's investment decision under high quality institutions, $\phi = 0$. Assume for simplicity that there is also no uncertainty in returns coming from market price fluctuations, such that $\sigma = 0$. Under this setting, the investment value is then equivalent to the usual present value model in which expected returns are simply discounted by an appropriate risk adjusted rate, r. That is:

$$V(P)\big|_{\phi=0} = \frac{P}{r-\alpha} \tag{4.5}$$

The firm's problem therefore reduces to the usual net present value decision rule:

$$\max\left(\frac{P}{r-\alpha}-C(I),0\right) \tag{4.6}$$

Result I: The solution to equation (4.6) is that the firm's decision is to invest if $\frac{P}{r-\alpha}-C(I)\geq 0$ or $P\geq(r-\alpha)C(I)$ and to refrain from investing otherwise. This result simply implies that whenever the discounted value of returns exceed the initial investment costs, the firm will find it optimal to invest in a developing country. If the discounted returns fall short of the initial cost outlay, the firm will not invest in such a country.

4.4.2 Characterising the Equilibrium Solution under Conditions of Institutional Uncertainty ($0<\phi<1$)

The study now turns to the more interesting case where the firm faces low quality of institutions and uncertain returns, that is where $0<\phi<1$, and $\sigma>0$.The foreign investor now either undertakes the investment and earns stochastic flows of benefits, or postpones the investment (holding the option to invest). The investor trades off the benefit of waiting for more information on the quality of institutions before committing to the investment against the opportunity cost of waiting. Thus the option value of waiting to invest ($F(P)$) indicates whether a firm decides to invest immediately or to delay the investment decision and wait for new relevant information on institutional quality. The investor's problem is now an optimal stopping problem in continuous time. This problem is best solved using dynamic programming.[18] The Bellman equation of this problem reads:

$$F(P(t))=\max\left\{V(P(t))-C(I),\ \mathbb{E}_t\left[F(P(t+dt))\right]e^{-rt}\right\} \tag{4.7}$$

[18]Contingent valuation is an alternative approach to solve this problem. Here, we use dynamic programming techniques because this approach does not require the existence of a sufficiently rich set of markets in risky assets so that the stochastic component of the risky project under consideration can be exactly replicated.

Dixit and Pindyck (1994) show that if the firm delays investment and holds an option, the Bellman equation in the continuation region is equivalent to:

$$rF(P)dt = \mathbb{E}_t\left[dF(P)\right] \tag{4.8}$$

$$rF(P) = \frac{\mathbb{E}_t\left[dF(P)\right]}{dt} \tag{4.9}$$

This equation states that over the interval dt, the returns on holding the option of investing $rF(P)dt$ is equal to the expected rate of capital appreciation, $\mathbb{E}_t\left[dF(P)\right]$. Thus, equation (4.9) essentially describes a no arbitrage condition (Carruth et al., 2000).

Using Ito's Lemma[19] it can be shown (see Dixit and Pindyck, 1994) that the Bellman equation can be written as:

$$\alpha PF'(P) + \frac{1}{2}\sigma^2 P^2 F''(P) - rF(P) = 0 \tag{4.10}$$

Equation (4.10) defines the Bellman equation for a firm that faces uncertainty, irreversibility and an option to delay investment. If the firm follows the optimal rule, the value of the option to wait must satisfy the differential equation (4.10) together with the boundary conditions given in equations (4.11) to (4.13):

$$F(0) = 0 \tag{4.11}$$

$$F(P^*) = V(P^*) - C(I) \tag{4.12}$$

$$F'(P^*) = V'(P^*) \tag{4.13}$$

where P^* is the optimal threshold level. Condition (4.11) states that if the return on investment is zero, then the value of an option to invest is also zero. Condition (4.12) describes the net

[19]Io's Lemma is an identity used in stochastic calculus to find the differential of a time-dependent function of a stochastic process; it serves as the stochastic calculus counterpart of the chain rule. See the derivation and proof of the Lemma in the Appendix.

payoff of returns at which it is optimal to invest. Condition (4.13) features the "smooth pasting" condition (see Dixit and Pindyck, 1994) which requires the option value to be continuous and smooth around the optimal investment timing point.

Result II: The solution to the firm's problem under conditions of uncertainty is that its optimal decision will be determined by the threshold level of returns relative to the prevailing returns in the market.

Claims:

1) Under certainty and strong institutions ($\sigma = 0$ and $\phi = 0$), the investor's optimal decision is determined by the threshold $\hat{P} = (r-\alpha)C(I)$. Investment is undertaken if $P \geq \hat{P}$.

2) Under uncertainty and weak institutions ($\sigma > 0$ and $0 < \phi < 1$), the investor's optimal decision is determined by the threshold $P^*$and Investment is undertaken if $P \geq P^* > \hat{P}$.

$$P^* = (r-\alpha)\left[\frac{\tilde{\lambda}}{(\tilde{\lambda}-1)}\frac{C(I)}{(1-\phi)}\right] \text{ where } \tilde{\lambda} = \frac{1}{2} - \frac{\alpha}{\sigma^2} + \sqrt{\left(\frac{1}{2} - \frac{\alpha}{\sigma^2}\right)^2 + \frac{2r}{\sigma^2}} > 1 \tag{4.14}$$

3) Enhanced institutional weakness raises the trigger threshold level P^*:

$$\frac{dP^*}{d\phi} = \frac{1}{(1-\phi)^2}\left[\frac{(r-\alpha)\tilde{\lambda}C(I)}{(\tilde{\lambda}-1)}\right] > 0 \tag{4.15}$$

P^* defines the minimum threshold level of returns that triggers investment. For low returns on investment $P < P^*$ the foreign investor holds onto his option to invest while he exercises his option and invests in the host country if the returns exceed the threshold, i.e. $P \geq P^*$. This threshold is a function of institutional quality (ϕ) and other exogenous parameters of the model. How then does institutional quality affect the value of P^*? Given the model's assumptions, it is straight forward to show that $\frac{dP^*}{d\phi} > 0$.

The Prediction of the Model

The key prediction of the model is that a deterioration in the quality of institutions (an increase in ϕ) raises the threshold level that triggers investment. This leads to low level of FDI in a host country.This is because under conditions of institutional uncertainty, foreign investors would postpone their investment until such uncertainty is cleared. Conversely, improving the quality of institutions (a reduction in ϕ) promotes investment by reducing the threshold level. This implies that when the institutional weakness improves, foreign investment would take place in a developing host country[20].

4.5 Empirical Methods and Data Issues

4.5.1 Empirical Model

To test the main prediction of the theoretical model and validate the claim that Kenya has failed to attract substantial FDI because of weakness in institutions, the research uses the standard Time Series cointegration and VECM causality techniques. Specifically this study seeks to discover whether the quality of institutions has any causal effect on FDI in Kenya. If yes, to what extent? To answer this question and test the main prediction of the theoretical model, an econometric model based on the previous literature on the determinants of FDI is used. The basic estimable model is specified as follows:

$$lnFDI_t = \alpha + \beta_1 lnfhpr_t + \beta^{'} X \tag{4.16}$$

Where the dependent variableFDI_t is the natural logarithmic of real foreign direct investment flows at time$t$. The flows of FDI are used because the recent and large changes in FDI behaviour

[20]However, when returns are sufficiently high many firms are willing to invest even in war-torn countries that suffer institutional breakdown. (Guidolin and La Ferrara 2007).

may not be apparent in FDI stock figures in most instances(see also Hansen and Rand, 2006; Herzer et al., 2008). That is changes in stocks on a year-to-year basis could be quite small when they occur against an absolutely accumulated base value. The net inflows of FDI is also used because is the best measure of the country's ability to attract FDI. This is in contrast to Gwenhamo (2011) and Read (2008) who use the stocks of FDI based on the assumption that the long term contribution of FDI to domestic investment, and the policy stance towards FDI may be better reflected in the accumulated FDI stock data. Since we are not assessing the contribution of FDI to economic development in this chapter[21], the use of FDI stocks is not relevant.

4.5.2 Variables and Data Issues

This study allows FDI flows to be explained by the quality of economic institutions proxied by the natural logarithmic of property rights institutions denoted by $lnfhpr_t$ and that of political institutions proxied by the political rights and civil liberties index, and a set of other explanatory variables contained in the vector X. These two indices are constructed by the author and the details of the methodology for their computation is elaborated on in Chapter (2) of this thesis[22]. The freehold property rights is a de-jure index in nature computed from legal frameworks that govern immovable property. This is done to capture North's hypothesis of the durability of institutions. The political institutions proxy is also the de-jure index computed from laws that were passed in Kenya which affected peoples' political rights and freedoms over the period under consideration. The data is available for the period 1884 to 2010. This chapter only considers data for the post independence period from 1970 to 2010 to match the FDI dataset, and also because the other variables used in the model have data limited to this period.

The variables in the vector X include the logarithm of real Gross Domestic Product in constant 2000 US dollars at time t ($lnRGDP_t$) to account for market size; Trade openness of the economy ($OPEN_t$) measured by the ratio of imports and exports to Gross Domestic Product (in percentage)

[21] This would in-fact reflect more in the stocks of FDI in the economy

[22] see Letete et al., 2011 for detailed methodological discussions on the computation of these indices

[23]; ratio of Capital to Labour (k/l) to proxy for capital deepening in the economy; Macroeconomic Policy Management measured by the ratio of Government Debt to Gross Domestic Product $(Govdebt)$; the real exchange rate $(REER)$ to proxy for the competitiveness of the economy and the Education level of the labour force (Edu_t) measured by the ratio of people with secondary school education. Admittedly, that there are potentially many factors that determine FDI inflows. However, these cannot all be included in the regression model because of the small sample size ($T = 40$ observations). This also helps us avoid the problem of multicollinearity. For this reason, the stepwise regression procedure is used to find the best combination of explanatory variables by deleting the insignificant variables.

An analysis of this kind requires high frequency data but such data is not available for Kenya. This limitation prompted the use an annual Time Series data, which could affect the reliability of the results. However, several modeling techniques are used to check the robustness of the results. The research also accounts for some obvious problems such as the structural breaks and regime changes during the estimation process through the use of impulse dummies[24]. Table (4.5) provides the names of the variables used, their descriptions, sources and the time period for which they were measured.

Cointegration Analysis

To establish the long-run relationship between institutions and FDI, the bounds test cointegration approach proposed by Pesaran et al. (2001) is applied. This approach is adopted because it does not require variables to be integrated of the same order. Specifically, the test has the additional advantage of yielding consistent estimates of the long-run coefficients that are asymptotically normal irrespective of whether the underlying regressors are $I(1)$ or $I(0)$. In accordance with the requirements of the ARDL technique that variables are not integrated of order 2 or beyond, all variables are tested for non-stationarity first to determine their order of integration. This is

[23]The most appropriate measure to use would have been capital account openness but this is difficult to measure. We therefore use the ratio of imports plus exports to gross domestic product.

[24]The results in this chapter nevertheless should still be interpreted with caution because of the general limitation of times series data obtained from statistical agencies, which has inherent errors which are difficult to isolate from the given dataset.

because modeling economic Time Series in the presence of I(2) variables makes the F-statistics provided by Pesaran et al. (2001) invalid because the bounds test is based on the assumption that the variables are I(0) and/ or I(1). Otherwise one could obtain inconsistent estimators and spurious results (i.e. results that look statistically significant in the model yet in fact all that is obtained is evidence of contemporaneous correlations rather than meaningful causal relations between them (Kwiatkowski et al., 1992) and (Dickey et al., 1986)). If variables are integrated of the same order, their combination could result in meaningful long-run relationships (Harris, 1992; Dickey and Fuller, 1979and Kahn and Ogaki, 1992). Equation 4.16 is specifically estimated within the following dynamic Autoregression Distributed Lag framework using OLS estimator:

$$\Delta y_t = c_0 + c_1 t + \theta_1 y_{t-1} + \theta_2 x_{t-1} + \sum_{i=1}^{k} \eta_i \Delta y_{t-i} + \sum_{i=0}^{k} \theta_i \Delta x_{t-i} + \delta^{'} w_t + \varepsilon_t;\ t = 1, ...n \tag{4.17}$$

where $\Delta$is the first difference operator; y_t is the FDI net inflows and x_t is the vector of k determinants of y_t namely:$RGDP_t$, $lnfhpr_t$, $OPEN_t$, $REER$, Edu_t, $Govdebt$, k/l , $M2/GDP_t$; w_t is a vector containing other deterministic terms such as structural break dummy variables and ε_t is the error term assumed to be normally distributed and white noise. The PSS F-test, tests for the absence of any level relationship between y_t and x_t by testing for the joint exclusion of lagged variables y_{t-1} and x_{t-1} using the F-statistic. This test is based on the null hypothesis that $\theta_1 = \theta_2 = 0$, under the sequential treatment of all variables in the specification as the outcome variables. The rejecting of the null hypothesis establishes the existence of a level relationship, hence the rejection of the weak exogeneity for the $y-$variable specified under the test.The order of augmentation is determined by the need to ensure that the error term is free of any systematic variation in order to extract the long-run relationship. The null hypothesis of "no long-run relationship" is restated in equation (4.18) and is tested against the alternative hypothesis given in equation (4.19):

$$H_0 : \theta_1 = \theta_2 = 0 \tag{4.18}$$

$$H_1 : \theta_1 \neq \theta_2 \neq 0 \tag{4.19}$$

However, the F-statistic used for the test has a non-standard distribution and it is influenced by whether the variables are $I(0)$ or $I(1)$. To circumvent this weakness, Pesaran et al. (2001) tabulate the two asymptotic critical values to be used. The upper bound critical value of F denoted by F_U assumes that all variables are $I(1)$ and the lower bound critical statistic denoted by F_L assumes that all variables are $I(0)$. If the estimated F-statistic is greater than the upper bound critical F-statistic ($\hat{F} > F_U$), one rejects the null hypothesis of "no long-run" relationship between level variables and conclude that there is a long-run relationship between the variable of interest. On the other-hand if $F - statistic$ computed is lower than the lower bound critical value proposed by Pesaran et al. (2001) ($\hat{F} < F_L$), one cannot reject the null hypothesis of "no long-run" relationship between variables of interest. If F-statistic computed falls between these critical values ($F_U > \hat{F} > F_L$), the result is inconclusive.

Given the small sample size ($T = 40$), we do not use the F-critical values provided by Pesaran et al. (2001) instead we use those provided by Narayan (2005). This is because the F-critical values provided by Pesaran et al. (2001) cannot be used in small samples since they were generated for large samples sizes (i.e. 500 and 1000 observations and 20 000 and 40 000 replications respectively). Narayan (2005) has tabulated the critical values for smaller samples of size 30 to 80 observations, using the same GAUSS code as Pesaran et al.,(2001). The critical values he reports are smaller than those generated and reported by Pesaran et al. (2001). During the estimation process, we control for political regime shifts through the use of the impulse dummy variables. we use the impulse dummy variables because they enable the characterization of the three political transition periods corresponding to the transition from Colonial regime to Kenyatta's regime, from Kenyatta's regime to Moi's regime, from Moi's regime to Kibaki's regime. Thus 1963=1 and 1978=1 and 2002=1 and zero otherwise respectively. These transition periods represent different policy and institutional discharges by different regime leaders which could potentially affect the other macroeconomic variables in the model and have influence on the inflows of FDI in Kenya's economy.

Granger Causality Analysis

The next step is to test for Granger causality between variables that are cointegrated using VECM to capture both the short-run and long-run causal relationships[25]. The following VECM is estimated expressed in its explicit form:

$$(1-L)\begin{bmatrix} lnFDIf_t \\ lnfhpr_t \\ lnRGDP_t \\ Govdebt_t \\ K/L_t \\ Educ_t \\ crps_t \end{bmatrix} = \begin{bmatrix} \alpha_1 \\ \alpha_2 \\ \alpha_3 \\ \alpha_4 \\ \alpha_5 \\ \alpha_6 \\ \alpha_7 \end{bmatrix} + \sum_{i=1}^{p}(1-L)\begin{bmatrix} A_{11,i} & A_{12,i} & A_{13,i} & A_{14,i} & A_{15,i} & A_{16,i} & A_{17,i} \\ A_{21,i} & A_{22,i} & A_{23,i} & A_{24,i} & A_{25,i} & A_{26,i} & A_{27,i} \\ A_{31,i} & A_{32,i} & A_{33,i} & A_{34,i} & A_{35,i} & A_{36,i} & A_{37,i} \\ A_{41,i} & A_{42,i} & A_{43,i} & A_{44,i} & A_{45,i} & A_{46,i} & A_{47,i} \\ A_{51,i} & A_{52,i} & A_{53,i} & A_{54,i} & A_{55,i} & A_{56,i} & A_{57,i} \\ A_{61,i} & A_{62,i} & A_{63,i} & A_{64,i} & A_{65,i} & A_{66,i} & A_{67,i} \\ A_{71,i} & A_{72,i} & A_{73,i} & A_{74,i} & A_{75,i} & A_{76,i} & A_{77,i} \end{bmatrix}$$

$$x\begin{bmatrix} lnFDIf_{t-i} \\ lnfhpr_{t-i} \\ lnRGDP_{t-i} \\ Govdebt_{t-i} \\ K/L_{t-i} \\ Educ_{t-i} \\ crps_{t-i} \end{bmatrix} + \begin{bmatrix} \pi_1 \\ \pi_2 \\ \pi_3 \\ \pi_4 \\ \pi_5 \\ \pi_6 \\ \pi_7 \end{bmatrix}[\varepsilon_{t-1}] + \begin{bmatrix} \xi_{1t} \\ \xi_{2t} \\ \xi_{3t} \\ \xi_{4t} \\ \xi_{5t} \\ \xi_{6t} \\ \xi_{7t} \end{bmatrix} \quad (4.20)$$

where $(1-L)$ is the first difference operator, ε_{t-1} is a one period lagged error-correction term derived from the cointegration equation and ξ_{it} are the serially uncorrelated random disturbance terms with zero mean. From Equation (4.20), the significance of ε_{t-1} indicates the presence of long-run causality, whereas the significance of a joint F-test on the lagged explanatory variables

[25]Note that even if the variables are not cointegrated, causality could still be performed on the first difference form of vector autoregressive (VAR) to capture only the short-run causal relationships

indicates the short-run causality. For instance, $A_{12,i} \neq 0$ indicates that there is short-run Granger causality running from property rights $(lnfhpr_{t-i})$ to foreign direct investment $(lnFDIf_{t-i})$, whereas $A_{21,i} \neq 0$, $A_{24,i} \neq 0$, $A_{27,i} \neq 0$ imply that foreign direct invest $(lnFDIf_{t-i})$, government debt $(Govdebt_{t-i})$ and credit to the private sector $(crps_{t-i})$ Granger cause a change in property rights institutions in Kenya $(lnfhpr_{t-i})$. The similar procedure can be applied to test the rest of the relationships between other variables in the system.

4.6 Estimation Results and Discussions

4.6.1 Unit Root Tests

The standard econometric theory suggests that many economic Time Series variables are often non-stationary (that is they have unit root): they have means, variances and covariances that often change over time. Kwiatkowski et al. (1992) and Dickey et al. (1986) argue that modeling such variables could result in inconsistent estimators and spurious results-results that look statistically significant in the model yet reflect only contemporaneous correlations rather than meaningful causal relations between variables being modeled. On the contrary, if such variables are integrated of the same order, their combination could result in revealing a meaningful long-run relationship (Harris, 1992; Dickey and Fuller, 1979and Kahn and Ogaki, 1992). In the light of these problems, it has become a common practice to test variables for non-stationarity before proceeding with estimations.

All the variables are tested for the null hypothesis of non-stationarity (unit root) using the Augmented Dickey Fuller (ADF) test-an approach that is widely used in empirical studies, and the Dickey Fuller Generalized Least Squares. The latter test is performed to validate the results obtained from the ADF test since this test is superior to the ADF test which suffers from low power in small samples (Harris, 1992, and Harris, 1995). The test of non-stationarity is performed preceding the test for any long-run relationship between variables. Table 4.1 reports the unit root

results. The test is performed first on the model that includes the lagged dependent variable and the constant term only. The results from this first leg of the unit root test are indicated in the table under the columns with (τ_{μ}). The second leg of the test is performed on the model that includes both the constant and trend. The results from the second leg of the unit root test are shown in the table under the column with (τ_{c+t}). These tests of non-stationarity are performed at both levels (X) and first difference (ΔX) of all variables.

The results from both the DF-GLS and ADF unit root test presented in Table 4.1 consistently indicate that the levels of all variables except trade openness are non stationary but their first differences are stationary. This tests suggests that $FDIf_t$, $fhpr_t$, $RGDP_t$, $educ_t$, $Govdebt_t$, $REER_t$, $crps_t$, $and K/L_t$ are integrated of order one, $I(1)$. These results further show that none of the variables is integrated of order higher than one (I(1)). Since one of the variables (trade openness ($Open_t$)) is integrated of order zero while others are integrated of order one, then the bounds test approach to cointegration is the most suitable.

4.6.2 Cointegration and Long-run Relationships

The next step is to formally test for the order of cointegration between variables using the Bounds test to cointegration as highlighted above, and discern any long-run relationship between them. Since the results of the Bounds test to cointegration are sensitive to the choice of lag order for ARDL model, an optimal lag length is determined using the modified Akaike information criterion and the modified Schwarz information criterion, and 2 years is set as the maximum lag order [26]. Because this research is interested in the parameters of a partial FDI model conditioned on some other variables, it tests for the *long-run weak exogeneity/the direction of association between all variables* in order to assess the variables that could be regarded as exogenous to the FDI cointegrating vector [27]. The importance of the exogeneity test has been pointed out particularly

[26]Enders (2004) suggest that 3 years is sufficiently long to capture the dynamic relationship between variables
[27]For a detailed discussion about exogeneity see Engle, Hendry, and Richard (1983)

Table 4.1: Results for Unit Root test

DF-GLS Unit Root Test							ADF Unit Root Test						
Variable	τ_μ	τ_{c+t}	Variable	τ_μ	τ_{c+t}	*Inference*	Variable	τ_μ	τ_{c+t}	Variable	τ_μ	τ_{c+t}	*Inference*
$lnFDIf_t$	-0.77	-1.24	$\Delta lnFDIf_t$	-9.40^{***}	-9.68^{***}	$I(1)$	$lnFDIf_t$	-0.71	-0.64	$\Delta lnFDIf_t$	-9.67^{***}	-9.56^{***}	$I(1)$
$lnfhpr_t$	−0.73	−0.19	$\Delta lnfhpr_t$	-3.36^{***}	-5.67^{***}	$I(1)$	$lnfhpr_t$	−1.60	−2.52	$\Delta lnfhpr_t$	-5.07^{***}	-5.99^{***}	$I(1)$
$lnRGDP_t$	−0.85	−0.84	$\Delta lnRGDP_t$	-5.20^{***}	-5.21^{***}	$I(1)$	$lnRGDP_t$	−2.53	−1.69	$\Delta lnRGDP_t$	-5.93^{***}	-6.52^{***}	$I(1)$
$educ_t$	−0.56	−1.63	$\Delta educ_t$	-2.67^{**}	-2.81^{**}	$I(1)$	$educ_t$	−0.69	−1.57	$\Delta educ_t$	-2.97^{**}	-2.81^{**}	$I(1)$
$Govdebt_t$	−0.42	−1.63	$\Delta Govdebt_t$	-5.36^{***}	-5.29^{***}	$I(1)$	$Govdebt_t$	−0.64	−1.68	$\Delta Govdebt_t$	-5.31^{***}	-5.23^{***}	$I(1)$
$Open_t$	-3.67^{**}	-3.63^{**}	$\Delta Open_t$	–	–	$I(0)$	$Open_t$	-3.49^{*}	-3.70^{*}	$\Delta Open_t$	–	–	$I(0)$
$REER_t$	−0.84	−1.68	$\Delta REER_t$	-5.64^{***}	-5.94^{***}	$I(I)$	$REER_t$	−1.33	−1.19	$\Delta REER_t$	-5.66^{***}	-6.02^{***}	$I(I)$
$lncrps_t$	−0.48	−1.75	$\Delta lncrps_t$	-8.79^{***}	-8.75^{***}	$I(1)$	$lncrps_t$	−1.68	−1.89	$\Delta lncrps_t$	-8.79^{***}	-8.75^{***}	$I(1)$
K/L_t	−0.44	−1.85	$\Delta K/L_t$	−8.51	−8.91	$I(1)$	K/L_t	−2.48	−2.99	$\Delta K/L_t$	-2.48^{**}	-4.54^{***}	$I(1)$

Notes: The asterisks ***, ** and * denote the rejection of the null hypothesis at the significance levels of 1%, 5% and 10% respectively

τ_μ denotes that the regression equation includes the constant only while τ_{c+t} denotes that it includes both the constant and trend variable

well in Engle et al. (1983) who give an overview of the various definitions in the literature. Weak exogeneity of the right-hand side variables means that no useful information is lost when one conditions on these variables without specifying their generating process (Johansen, 1992). Chiying and Pu (2004) also notes that valid inference based on a partial system can only be conducted when the conditioning variables are weakly exogenous for the parameters of the partial system. Standard procedures to test weak exogeneity of the conditioning variables have to be based on the estimated cointegration vectors.

Table (4.2) presents the results for the bounds testing approach to cointegration when each of the variables is taken as a dependent variable. The results show that the F-statistics computed is greater than the 5% critical F-statistics when $lnFDI$ and $lnRGDP$ are taken as dependent variables in the equations. These results suggest an existence of long-run relationship between our variables of interest in the $lnFDI$ vector and $lnRGDP$ vector. The results show further that property index ($lnfhpr$), real exchange rate($REER$), ratio of capital to labour (K/L), government debt ($Govdebt$) are weakly exogenous to $lnFDI$ vector and $lnRGDP$ hence can be regarded as forcing variables. This is detected from the fact that the F-statistic computed when each of these variables is a dependent variable is less than the 5% critical F-statistics from Narayan (2005). The findings show that FDI and its determinants are cointegrated and have a meaningful long-run relationship.

Table 4.2: Results of Bounds test for Cointegration

Different Variables Orderings	F-Statistics	Probability	5% critical F-Statistics		Inference
			Lower I(0)	Upper I(1)	
$F_{lnFDI}\,(lnFDIf \mid lnfhpr_t,\, lnRGDP_t, OPEN, REER, Edu_t, Govdebt,\, K/L,\, crps/GDP_t)$	4.61	0.00^{***}	2.676	4.130	cointegration: $lnFDIf$ is endogenous variable
$F_{lnfhpr}\,(lnfhpr \mid lnFDIf,\, lnRGDP_t,\, OPEN_t, REER, Edu_t, Govdebt,\, K/L,\, crps/GDP_t)$	1.38	0.29	2.676	4.130	No cointegration: $lnfhpr$ is a forcing variable
$F_{lnRGDP}\,(lnRGDP_t \mid lnfhpr_t,\, lnFDIf_t,\, OPEN_t, REER, Edu_t, Govdebt,\, K/L,\, crps/GDP_t)$	5.61	0.00^{***}	2.676	4.130	cointegration: $lnRGDP$ is endogenous variable
$F_{REER}\,(REER \mid lnfhpr_t,\, lnRGDP_t,\, OPEN_t, lnFDIf_t, Edu_t, Govdebt,\, K/L,\, crps/GDP_t)$	0.64	0.67	2.676	4.130	No cointegration: $REER$ is a forcing variable
$F_{Edu}\,(Edu \mid lnfhpr_t,\, lnRGDP_t, lnFDIf\, OPEN_t, REER,\, Govdebt,\, K/L,\, crps/GDP_t)$	2.91	0.05	2.676	4.130	Inconclusive
$F_{K/L}\,(K/L \mid lnfhpr_t,\, lnRGDP_t,\, OPEN_t, lnFDIf_t, Edu_t, Govdebt,\, REER,\, crps/GDP_t)$	1.50	0.25	2.676	4.130	No cointegration: K/L is a forcing variable
$F_{Govdebt}\,(Govdebt \mid lnfhpr_t,\, RGDP_t,\, OPEN_t, REER, Edu_t, lnFDIf,\, K/L,\, crps/GDP_t)$	1.79	0.38	2.676	4.130	No cointegration: $Govdebt$ is a forcing variable

Notes: Asymptotic critical values are obtained from Narayan (2005) and the 1% and 10% critical values are specified below for for easy of reference. The model contains unrestricted intercept and no trend

The 1%, and 10% bounds critical values are $F_U = 5.464, F_L = 3.644$ *, and* $F_U = 3.534, F_L = 2.260$ *respectively for* $K = 7$ *and* $T = 40$*. The maximum lag length for all equations is 2 years*

Since it has been found that FDI and its determinants are cointegrated, computation of its long-run determinants is necessary and this enables an assessment of the extent to which property rights $(fhpr)$ matter for FDI in Kenya. The Fully Modified Ordinary Least Squares (FMOLS) estimator proposed by Phillips and Hansen (1990) is employed to estimate the cointegrating relationship between FDI and its determinants. The FMOLS is chosen because it has superior performance in finite samples (Phillips and Loretan, 1991)). In addition it provides reliable point estimates and test statistics (Cappuccio and Lubian, 2001). Moreover, Harbo et al. (1998) reveals in the Monte-Carlo experiment that FMOLS is the best estimator even when the cointegrating dimensionality is unknown. Table 4.3 provides the FMOLS estimation of the long-run impacts of property rights $(lnfhpr)$, real gross domestic product $(lnRGDP)$, financial development measured by the amount of credit extended to the private sector $(lncrps)$, ratio of capital to labour (K/L), government debt to GDP $(Govdebt)$ and education of the labour force $(Educ)$ on inward FDI in Kenya.

Table 4.3: Results for test of Long-run Relationship between FDI and Institutions

Variables	Co-efficients	t-Statistics	p-value
$lnfhpr$	3.15	2.39**	0.02
$lnRGDP$	7.70	2.09**	0.04
$lncrps$	2.72	2.26**	0.03
K/L	0.02	1.94**	0.05
$Govdebt$	-0.03	-3.68***	0.00
Edu	0.27	3.35***	0.002
$REER$	0.25	2.52***	0.031
$Constant$	-156.43	75.86**	0.04
$Trend$	0.01	0.11	0.91

Notes: Sample: 1970-2010; Variables are defined in Table 2.7;
Asteriks ***, ** and * denote 1%, 5% and 10% significance levels respectively

Generally all the explanatory variables are found to be statistically significant at the 5% level or better. In line with other studies on the determinants of FDI, these results suggest that property rights $(lnfhpr)$ positively affect FDI in Kenya. The results further suggest that real GDP $(lnRGDP)$, education of the labour force (Edu), financial development $(lncrps)$, capital deepening (ratio of capital to labour$-K/L$) positively affect FDI flows in Kenya. These results are

in line with those obtained by Gwenhamo (2011) for the case of Zimbabwe, Choong and Lam (2010); Choong et al. (2005) andBlonigen (2005) for the case of Malaysia . However, the level of Government debt which was used in this case to proxy for macroeconomic management has an inverse effect on FDI into Kenya. Specifically, this study finds that market size (proxied by $lnRGDP$), property rights (proxied by $lnfhpr$) and financial development are the leading determinants of FDI into Kenya. The results indicate that a 1 percent increase in domestic market size would increase FDI by 7.7% while a 1 percent increase in the state of property rights institutions would increase FDI by 3.15% and a 1 percent increase in financial development would affect FDI by more that 2.7%. These results also support those obtained by Ang (2008); Tang et al. (2014); and Aw et al. (2010) for Malaysia, and Karimi et al. (2010) for ASEAN countries and Asiedu (2006) for African countries.

The effect of macroeconomic policy uncertainty captured by the level of external debt has significant effect on FDI in the long-run. The results indicate that the increase in external debt has negatively affected foreign direct investment in Kenya over the period under consideration. This effect does not change significantly in magnitude even when we include other variables in the model. The external debt burden increases the likelihood of balance of payment problems thereby act as a disincentive for foreign investors to invest in the economy lest the government imposes restrictions on profits and dividend remittances in order to stop the outflow of capital when it faces balance of payment problems. Thus rising debt levels have the immediate impact of discouraging foreign direct investment.

Similarly, the real exchange rate depreciation ($REER$), a measure of the country's competitiveness, positively affect foreign direct investment in Kenya over the sample period. Possible channels through which depreciation of the domestic currency works are the "relative wage" and "production costs" channels under which real depreciation reduces the country's wages and production costs relative to those of foreign counterparts. This makes the economy with a depreciated currency an ideal destination for investment (location advantage). The depreciation of the domestic currency improves the overall rate of return to foreigners contemplating an overseas investment

project. Despite the positive role of exchange rate depreciation, the levels of foreign direct investment did not improve drastically in the Kenyan economy because the cost of institutional uncertainty outweighed the return from investment in this economy. Golberg (2011) argues that substantial FDI might not be realized following real depreciation if such depreciation was anticipated and formed an expected cost of project finance for the FDI. Therefore given the prolonged history of domestic currency depreciation in Kenya, it could be expected that any depreciation of currency might have been anticipated by the bulk of foreign investors and only a few of them who did not possess adequate information might have invested in the economy.

Table (4.3) shows that the quality of the education of the labour force (*edu*) has an effect on foreign direct investment in Kenya. This result concurs with my a-priori expectation given that Kenya has had a relatively well skilled labour force compared to its neighbouring countries which might have been a center of attraction to foreign firms which require skills for their operations. Similarly, real gross domestic product (lnRGDP) has a positive impact on foreign direct investment and such impact is significant, thereby supporting the "market size hypothesis". The elasticity of foreign direct investment with respect to real income is 7.7, meaning that FDI responds by more percentage change to any change in real income (gross domestic product). This result shows that during growth deceleration in Kenya, FDI also shrunk because returns from investing in the economy were low and could not compensate for the investment risk.

The level of financial sector development captured by the financial intermediation index (credit to the private sector) reports a positive long-run effect on FDI in Kenya. This long-run elasticity is only significant at 5 percent level of significance. Nevertheless, this result supports the notion that the level of financial sector development is an important factor in attracting foreign investors. The endogenous growth theory suggests that the level of financial sector development may influence foreign direct investment and its impact on the diffusion of technology in the host country, thereby increasing the rate of economic growth[28].

However, the conditioning variables, openness of the economy (open), and political instability

[28] See Alfaro et al, (2004)

(pinstability) reported insignificant effects on foreign direct investment, although they appear with theoretically justifiable negative signs. These were therefore dropped from the model and their results are not reported here. The insignificance of "Open", may be explained by the fact that it is a limited proxy for openness as it captures only current account openness (share of exports and imports to gross domestic product) and the more appropriate measure would be that which also captures capital account openness. However such a measure is difficult to construct due to absence of a dataset that covers the 1970s[29]. Second, if the investment is horizontal in nature, implying that it is meant to serve the domestic market, it might be less affected by this measure of openness. However, restrictions of capital account and invisible components of the current account will affect the investor's ability to repatriate dividends and profits. Although political instability negatively affects foreign direct investment, its effect is insignificant. Such insignificance is warranted given that Kenya has been regarded by foreign investors to have a reasonably stable polity relative to its neighbors such as Rwanda, Uganda and Tanzania especially in earlier years up to 2006[30]. This does not eliminate the fact that Kenya has suffered episodes of instability such as the 2007 post election violence, as we showed in Chapter 2.

4.6.3 Do Property Rights Institutions affect FDI in Kenya in the Short-run?

This research finds that property rights affect FDI in Kenya in the long-run. This research further ascertains the direction of causality between property rights and FDI and other variables of interest in the short-run through the Granger causality technique. Since the variables are cointegrated, the Granger causality test is performed within an ECM framework. Table (4.4) presents the results of Granger causality test. The one period lagged error correction terms (ECM_{t-1}) are statistically significant at the 5 percent level or better when the natural log of foreign direct invest ($lnFDIf$), property rights institutions ($lnfhpr$), real gross domestic product ($lnRGDP$), financial develop-

[29] I am aware of the various indicators such as the Chin-Ito index, Quinn Index and Potchamanawong Index, constructed in literature to capture capital account openness but such measures have limited time coverage and do not provide enough variations to be used in Time Series studies.

[30] See Table 4.8 for Kenya's relative political stability rank compared to other East African Countries in appendix to this chapter

ment ($lncrps$), ratio of capital to labour (K/L) are dependent variable for the ECM equation. The results imply that there is a long-run causality running from property rights institutions, real gross domestic product, education of the labour force, financial sector development and capital labour ratio to foreign direct investment in Kenya. However the error correction term that appears with magnitude above 1 implies that the deviations from the long-run equilibrium are corrected by more than 100 percent in the short-run. In addition, the results provide some evidence of long-run Granger causality running from foreign direct investment, property rights institutions, financial development, macroeconomic management and capital deepening to real gross domestic product.

With regard to short-run causality, this research finds evidence of eleven uni-directional causality relationships and one bi-directional causality. However only some of these causality relationships have economic implications. For instance, the results reveal that even in the short-run foreign direct investment is Granger caused by property rights institutions in Kenya. Apart from the influence of property rights ($fhpr$), other variables that Granger cause FDI in the short-run are: The education of the labour force (Edu), financial development ($lncrps$) and capital deepening (K/L). Therefore foreign investors would be concerned with the state of property rights, macroeconomic management, the level of financial development, education of the labour force and the level of capital deepening when choosing whether to invest in Kenya. Although real gross domestic product Granger causes FDI in the long-run, it does not seem to exert any significant influence in the short-run. Second, Kenya's economic growth is Granger caused by foreign direct investment, property rights institutions, financial development, capital deepening and government debt. These results validate the FDI-led growth and the Institutions-growth hypothesis in the context of Kenya.

One other interesting result is the influence of education of the labour force on property rights institutions. The results show that increasing the level of education of the labour force is likely to change the status of property rights in the economy. Thus as more people acquire education, they are likely to demand more protection of their property. This positive role of education on institutions validates theoretical predictions from the political science literature which places education

at the centre of institutional formation. This literature is virtually unanimous in its conclusion that formal education is strongly linked to political knowledge, interest and involvement (see Mattes and Mughogho, 2009; Dalton, 2000 and Evans and Rose (2007)) hence property rights institutions. The path through which education affects property rights institutions is through political institutions which are themselves influenced by education through three channels. First, through the "positional path" which argues that formal education sorts citizens into differing social networks, situations, and classes. This affects their attitudes and behaviour in the political sphere, promoting democratic citizenship that would then lead to demand for property rights protection. Second, through a "socialization path" in which children are explicitly trained to see democracy as preferable to its alternatives and at a later stage when they have gained democracy, they would demand property rights protection. Finally, through "precognitive path" which argues that formal education increases people's verbal and cognitive proficiency, as well as their ability to construct their own ideas and think critically. Comparison of the results of this study with the findings from similar studies in the economic literature shows that they are in line with those obtained by Tang et al. (2014) and Gwenhamo (2011). The implication of the results is that during the period when property rights were weakening in Kenya, foreign direct investment was also shrinking, and during the period when the economy was performing relatively well, foreign direct investment was also increasing in the economy. Similarly, low levels of growth have reduced incentives for foreign investors to put their resources into Kenya over time.

Table 4.4: Granger Causality results based on VECM framework

	Explanatory Variables							
Dependent variables	$\sum_{i=1}^{2} \Delta lnFDI_{f_{t-i}}$	$\sum_{i=1}^{2} \Delta lnfhpr_{t-i}$	$\sum_{i=1}^{2} \Delta lnRGDP_{t-i}$	$\sum_{i=1}^{2} \Delta educ_{t-i}$	$\sum_{i=1}^{2} \Delta Govdebt_{t-i}$	$\sum_{i=1}^{2} \Delta lncrps_{t-i}$	$\sum_{i=1}^{2} \Delta K/L_{t-i}$	ECM_{t-1}
$\Delta lnFDIf_t$	—	11.13***	0.67	26.18***	3.69	6.29***	18.46***	-1.02***
$\Delta lnfhpr_t$	0.47	—	2.09	9.47***	0.29	0.79	2.56	-0.03**
$\Delta lnRGDP_t$	2.91***	2.25***	—	0.37	-0.07**	1.35**	1.36*	-0.01**
$\Delta educ_t$	4.71*	2.27	0.64	—	1.74	0.51	0.07	-0.06
$\Delta Govdebt_t$	1.45	1.23	0.06	0.29	—	0.84	1.21	2.28
$\Delta lncrps_t$	3.31	1.42	2.86	8.81***	12.25***	—	1.66	-0.02*
$\Delta K/L_t$	0.33	0.32	5.56	0.75	1.39	4.89**	—	-1.88*

Notes: In all the regressions we included openness and political instability indicators as conditional explanatory variables

4.7 Conclusion

This Chapter has explored how the quality of institutions affect foreign direct investment in Kenya. A theoretical model was constructed of an investor decision making when faced with institutional uncertainty in an environment characterized by weak institutions based on real option theory to investment. Using this model, optimal conditions for investors decision making under such environment were derived. This theoretical model showed that institutional uncertainty increases the option value of investment, and therefore reduces any level of investment that could be made in a developing economy. Firms find it optimal to reschedule their investment plans to some future date with the hope that there will be some improvement in institutions. This implies that the higher the uncertainty, the higher the option value to invest. As uncertainty increases in the economy, the threshold returns that firms expect to get as a compensation for uncertainty also rises and this results in the failure of an economy to attract investment. The lower the uncertainty, the more likely the investment is to be undertaken immediately. That implies that there is a positive relationship between property rights protection and the level of investment in an economy. Thus institutional uncertainty tends to delay investment. This assumption was empirically tested using Time Series data for Kenya from 1970 to 2010. Specifically this tested the prediction that property rights protection positively affects FDI. The results from this Chapter present evidence that institutional quality indeed affects foreign direct investment in Kenya. However, there are other factors that remain important in attracting foreign direct investment. These factors include overall macroeconomic management and political stability. The results of this research show that weak macroeconomic policies are also disincentives for foreign investors. Based on this evidence, this study concluded that foreign investment into Kenya is restrained by the quality of its institutions. Similarly, the quality of institutions might have subsequently affected real growth over the period under consideration. Two basic policy implications emerge from this Chapter. First, that improvement in the quality of institutions can benefit the growth process in Kenya through its effect on both foreign direct investment and other channels. Second, macroeconomic policy management characterized by sustainable debt levels in the presence of good institutional environment appears

very important to attract foreign direct investment. Political stability remains one of the most important factors that helps attract foreign capital stocks into any economy. However, caution must be made that foreign direct investment decisions are influenced by a combination of other factors beyond macroeconomic policy management and the quality of institutions.

APPENDIX TO CHAPTER 4

APPENDIX C

Table 4.5: Names of Variables, their Descriptions and Sources

Variable name	**Description**	**Source**	**Coverage**
$lnFDI_s$	Foreign Direct Investment stocks in 2000 constant prices expressed in natural logarithmic	(UNCTAD)[a].	1970-2010
FDI_f	Foreign Direct Investment net inflows	WDI and UNCTAD	1970-2010
$lnFDI_f$	Foreign Direct Investment net inflows expressed in natural logarithmic	UNCTAD	1970-2010
$lnRGDP$	real GDP (in constant 2000 prices) expressed in natural logarithmic	WDI	1970-2010
$fhpr$	Freehold Property Rights index	Letete et al. (2011)	1970-2010
$Educ$	Education of the labour force given by the ratio of population with secondary school education	BL education statistics	1970-2010
$Govdebt$	Total Government Debt to GDP	WDI	1970-2010
$Openness$	Trade openness given by the ratio of Imports + Exports to GDP	WDI	1970-2010
$RexR$	Real exchange rate of Kenya Shilling to US Dollar	WDI	1970-2010
$Crps/GDP$	Credit to the private sector as a ratio of GDP	WDI	1970-2010
$Pinstability$	Political instability measure	Letete et al. (2011)	1970-2010
(k/l)	capital-labour ratio	WDI	1970-2010

BL education Statistics = Barro and Lee Education Statistics

[a] The Data from 1980 to 2010 was collected from UNCTAD while from 1960 to 1979 was computed using the inventory method (See appendix for this method)

Table 4.6: The Correlations Matrix For Institutional Indicators and for Macroeconomic Variables for Kenya (the Spearman Correlation Coefficient)

Correlation	$lnFDIf$	$FhPR$	$lnRGDP$	(k/L)	$Pinstability$	$REER$	Edu	$crps$	$open$	$Govdebt$
$lnFDIf$	1.0									
	...									
$fhpr$	0.490*	1.0								
	(0.000)	...								
$lnRGDP$	0.954*	0.629*	1.0							
	(0.000)	(0.000)	...							
(k/L)	0.555*	0.564*	0.723***	1.0						
	(0.000)	(0.000)	(0.000)	...						
$Pinstability$	−0.024	0.214	−0.555	−0.352**	1.0					
	(0.871)	(0.139)	(0.288)	(0.013)	...					
$REER$	0.850*	0.346***	0.812	0.268***	−0.117	1.0				
	(0.000)	(0.015)	(0.000)	(0.063)	(0.425)	...				
Edu	0.966*	0.609*	0.963	0.527*	−0.064	0.886	1.0			
	(0.000)	(0.000)	(0.000)	(0.001)	(0.661)	(0.000)	...			
$crps$	0.771*	−0.645	0.842***	0.802*	−0.038	0.428	0.750	1.0		
	(0.000)	(0.000)	(0.000)	(0.000)	(0.792)	0.002)	(0.000)	...		
$Open$	−0.142	0.386	0.163	−0.102	0.023	−0.032	−0.212	−0.159	1.0	
	(0.331)	(0.006)	(0.261)	(0.483)	(0.876)	(0.826)	(0.144)	(0.277)	...	
$Govdebt$	−0.212*	−0.012	−0.231	0.321	0.231	0.951	0.913	0.3181	−0.091	1.0
	(0.000)	(0.680)	(0.000)	(0.561)	(0.234)	(0.000)	(0.000)	(0.043)	(0.569)	...

Asterisk ***, ** and * indicates 1%, 5%, and 10% level of significance respectively. P-Value in brackets. Period: 1960-2010

Table 4.7: Estimated Revenue Losses From Tax Incentives in Kenya (2003-2008)

Investment Incentives (Figures in Kenya Shelling (Kshs) Millions)						
	2003/04	2004/05	2005/06	2006/07	2007/08	Total
Investment Deductions	4,031	14,703	4,323	4,295	11,842	39,134
Industrial Building allowance	481	1,021	539,298	494	2,833	544,127
Wear and Tear	19,007	21,294	21,684	11,109	40	73,134
Farm world allowance	814	1,130	1,256	609	876	4,685
Mining Operations Deductions	203	715	45	70	215	1,248
Sub-Total	24,536	38,863	27,847	16,381	13,467	121,094
Trade Related Incentives						
EPZ	103	1,712	5,300	6,694	5,804	19,613
MUB	20	310	937	721	96	2,084
TREO	2,989	2,537	3,974	7,591	6,149	23,590
Sub Total	3,102	4,559	10,211	15,366	12,049	45,287
Total	27,638	43,422	38,058	31,747	45,516	166,381
Revenue Loss as % of GDP	1.43	1.66	2.08	1.85	1.29	
Import Duty Exceptions Granted by Kenya (Figures in US$ Million)						
Value of Exceptions		800.9	1,370.8	1,626.7	2,306.2	61,046
Revenue Foregone		201.4	289.5	430.8	566.90	14,886
Total Trade Taxes		1,529.7	1,749.0	2,273.2	2,451.6	8,003.5
Percentage (%) Revenue Foregone		11.6	14.2	15.9	18.8	60.5

Source: EAC Secretariat, EAC Trade Rport 2008, 2010, p.51 and Kenya Revenue Authority (KRA). The Table shows total losses of 25.5 Kshs billion (US$282 million) in 2007/08, and cumulative losses over the five years of KShs 166 billion (US$1.84 billion) These losses amount to to an average of 1.7% of GDP. Over the four years, Kenya lost US$1.49 billion in import duty exceptions.

Deriving the Threshold Returns (P^*)

To solve for $F(P^*)$, hence the optimal threshold level of P^*, we solve equation (4.10) subject to the boundary conditions in equation (4.11)e(4.13) to determine the value of an option and finally the threshold level of returns. The form of the general solution to differential equation (4.10) is given in equation (4.21) with its corresponding first and second order derivatives shown in equation (4.22) and (4.23) respectively:

$$F_\phi(P^*) = A_\phi P^\lambda \tag{4.21}$$

$$F'_\phi(P^*) = \lambda A_\phi P^{\lambda-1} \tag{4.22}$$

$$F''_\phi(P^*) = (\lambda-1) A_\phi P^{\lambda-2} \tag{4.23}$$

Table 4.8: Kenya’s relative political stability rank compared to other East African Countries

Country	1996	1998	2000	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Kenya	21	17	15	15	13	16	12	15	11	10	9	13	13	10	13	9
Uganda	7	12	11	11	6	11	8	13	18	17	17	16	17	19	19	16
Rwanda	3	3	5	4	16	14	19	25	34	33	29	38	41	39	43	42
Tanzania	22	29	23	34	21	24	28	33	32	37	48	46	46	46	41	27

Source: World Governance Indicators; Note: Countries are ranked on a scale of zero to 100 where higher scores reflect better performance

Substituting equation (4.21) into (4.12), we get:

$$A_{\phi}P^{\lambda} = V_{\phi}(P^{*}) - C(I) \tag{4.24}$$

Given that $V_{\phi}(P^{*}) = \frac{(1-\phi)P}{r-\alpha}$ under uncertainty, we then substitute this value into equation (4.24) and get:

$$A_{\phi}P^{\lambda} = \frac{(1-\phi)P^{*}}{r-\alpha} - C(I) \tag{4.25}$$

Using the smooth pasting condition shown in equation (4.13) and respective derivatives of $F'(P)$ (from equation 4.22) and $V'(P)$, we get:

$$\begin{aligned} \lambda A_{\phi}{P^{*}}^{\lambda-1} &= \frac{(1-\phi)}{r-\alpha} \\ A_{\phi}{P^{*}}^{\lambda} &= \frac{(1-\phi)}{r-\alpha}\frac{P^{*}}{\lambda} \end{aligned} \tag{4.26}$$

Substituting equation (4.25) into equation (4.26) and simplifying, we get:

$$\begin{aligned} \frac{(1-\phi)}{r-\alpha}\frac{P^{*}}{\lambda} &= \frac{(1-\phi)P^{*}}{r-\alpha} - C(I) \\ \frac{(1-\phi)P^{*}}{r-\alpha} - \frac{(1-\phi)}{r-\alpha}\frac{P^{*}}{\lambda} &= C(I) \\ P^{*} &= \frac{\lambda}{(\lambda-1)}\frac{(r-\alpha)}{(1-\phi)}C(I) \end{aligned} \tag{4.27}$$

Equation (4.27) defines the minimum critical threshold level of returns from any risky investment that a representative foreign firm will require to invest. It is a function of institutional uncertainty (ϕ) and some other parameters. The next step is to determine the value of λ so that we can do our

comparative statics to see the influence of the quality of institutions on P^*. The value of λ is the solution to the differential equation (4.10).

Substituting equations (4.21), (4.22) and (4.23) into equation (4.10) and simplifying we get:

$$\alpha P\lambda A_\phi P^{\lambda-1}+\frac{1}{2}\sigma^2P^2(\lambda-1)A_\phi P^{\lambda-2}-rF_\phi=0 \tag{4.28}$$

$$\alpha P\lambda A_\phi P^{\lambda-1}+\frac{1}{2}\sigma^2P^2(\lambda-1)A_\phi P^{\lambda-2}-rA_\phi P^\lambda=0$$

$$\alpha\lambda A_\phi P^\lambda+\frac{1}{2}\sigma^2(\lambda-1)A_\phi P^\lambda-rA_\phi P^\lambda=0$$

$$\alpha\lambda+\frac{1}{2}\sigma^2(\lambda-1)-r=0$$

$$\lambda^2\sigma^2+2\alpha\lambda-\sigma^2\lambda-2r=0 \tag{4.29}$$

Equation (4.29) specifies the usual quadratic equation under real option analysis also known as fundamental quadratic equation (see Dixit and Pindyck, 1994) which when solved for the values of λ gives: $\tilde{\lambda}$

$$\tilde{\lambda}=\frac{1}{2}-\frac{\alpha}{\sigma^2}+\sqrt{\left(\frac{1}{2}-\frac{\alpha}{\sigma^2}\right)^2+\frac{2r}{\sigma^2}}>1 \tag{4.30}$$

or

$$\tilde{\lambda}=\frac{1}{2}-\frac{\alpha}{\sigma^2}-\sqrt{\left(\frac{1}{2}-\frac{\alpha}{\sigma^2}\right)^2+\frac{2r}{\sigma^2}}<0 \tag{4.31}$$

We then ignore the second solution for $\tilde{\lambda}<0$ because it does not fulfill the optimality condition given in equation (4.11). Therefore the threshold option value of returns under institutional uncertainty is given by:

$$P^{*}=(r-\alpha)\left[\frac{\tilde{\lambda}}{(\tilde{\lambda}-1)}\frac{C(I)}{(1-\phi)}\right]=P^{*}(\phi)\ \ with\,\tilde{\lambda}=\frac{1}{2}-\frac{\alpha}{\sigma^{2}}+\sqrt{\left(\frac{1}{2}-\frac{\alpha}{\sigma^{2}}\right)^{2}+\frac{2r}{\sigma^{2}}}>1 \quad (4.32)$$

Comparative Statics

The question that follows is how then does institutional uncertainty parameter affect the value of P^{*} which serves as the firm's investment decision guide in the long-run. To answer this question we perform simple comparative statics on the threshold equilibrium returns (P^{*}). We use the total differential theorem to find our comparative statics between P^{*} and the uncertainty parameter ϕ and then characterize the solution therefrom.

$$\frac{dP^{*}}{d\phi}=\left[\frac{(r-\alpha)\,\tilde{\lambda}C(I)}{(\tilde{\lambda}-1)}\right]\left[\frac{1}{(1-\phi)^{2}}\right]>0 \quad (4.33)$$

Equation 4.33 gives the change in the threshold of investment (dP^{*}) as a result of the change institutional quality $(d\phi)$. Given the conditions that $r>\alpha>0;\,0\ <\phi<1;\,\sigma>0$ and $\tilde{\lambda}>1$, then it implies that $(\tilde{\lambda}-1)>0$, $(r-\alpha)>0$ and $(1-\phi)>0$, hence $\left[\frac{dP^{*}}{d\phi}\right]>0$.

Chapter 5

Illicit Financial Flows and Institutions in Kenya: To What Extent Do Political Institutions Matter?

"Corrupt political Elites in the developing world, working hand-in-hand with greedy business people and unscrupulous investors, are putting private gain before the welfare of citizens and the economic development of their countries– Peter Eigen, (2002: page 2)[1]*."*

5.1 Motivation

At the turn of the 21st century many African economies have continued to face the developmental challenge of illicit financial outflows[2]. This occurs despite these countries' development finance gap. Reuter (2012); Ndikumana and Boyce (2012b); Cerra et al. (2008); Kar and Cartwright-Smith (2008) claim that these illicit flows have undermined the process of

[1] see Peter (2002)

[2] In this chapter, the phrase illicit financial flows and capital flight are used interchangeably

economic development in these countries. A quick historical glimpse at them shows they are not a new phenomenon. They have been a problem since these countries gained independence from the Imperial Powers. These outflows of financial resources are an enigma that raises several key questions: Why do these countries experience such outflows yet they undermine their process of economic development? Are these outflows a result of weaknesses in political institutions (extractive institutions in Acemoglu's parlance) that were set up during colonial rule that have allowed maximum rent extraction by the post-colonial rulers? Are they the result of weaknesses in political institutions that were created in the post-colonial period by the local political elites following political transition from colonial rule that have also allowed maximum rent extraction? How do we explain this enigma?

An explanation in economic literature advanced by the proponents of the Neoclassical economic tradition (from now on the conventional economic wisdom) equates these flows to capital flight. It views them as resulting from rational reallocation of capital from developing countries in response to the favorable risk-return investment opportunities in the developed world, and investors' desire for portfolio diversification (Le and Zak, 2006; Collier et al., 2001; Sheets, 1996). Within this context the risk adjusted returns on assets abroad are believed to be higher than those in developing countries. The level of investment risk is believed to be high in developing countries in part because of macroeconomic policy distortions such as overvalued exchange rates, huge fiscal deficits, and unfair taxation of capital gains, and interest rate controls under financially repressed markets. The repressed financial markets prevailed in a number of developing countries, especially in Africa before the market liberalization reforms of the 1990s (Lensink et al., 1998; Ajayi, 1995).

However, recent investigations have questioned this conventional wisdom. In particular, they have pointed out that portfolio motives are by no means the primary drivers of capital from developing countries. Therefore policy advice on how to curb such flows should be directed elsewhere, at causes beyond portfolio motives (Blankenburg and Khan, 2012; Ndikumane and Boyce, 2011). The modern political economy literature and the new institutional economics literature

have pointed out that this problem results from specific fundamental problems the developing countries have long struggled with. These include corruption and rent seeking by political leaders who have been able to extract enormous rents while in power in a seemingly unconstrained manner. According to this literature, corruption and the lack of development are a result of extractive political institutions. Extractive political institutions refer to those institutions that do not constrain political leaders and their elite groups; that concentrate power in the hands of a few, and that do not provide checks and balances or "rule of law". These institutions are claimed to have led to pervasive rent seeking and stifled the process of economic development in developing countries (Acemoglu et al., 2004, 2003; Rodrik et al., 2002; Clague et al., 1996; Sachs et al., 1995)[3].

Noticeably, these latter theoretical assertions seem to be consistent with several reported incidences of political corruption in which many political leaders in Africa such as Mobutu, Moi and Houphouet-Boigny were at one point alleged to possess personal fortunes equivalent to the total foreign debt accumulation of their economies (Ayittey, 1992)[4]. Recently, political corruption incidences have increased in some African countries. For instance, the IMF (2010) reported that US$32 billion from oil revenue was missing in Angola (a quarter of Angola's GDP)[5] and more than US$2.5 million was missing in Malawi in a scandal that became famously known as the Cash gate scandal[6]. Regardless of these scandals, a number of political leaders allegedly involved in them have often ruled their countries for decades without challenge from their populace[7]- a

[3]These claims are backed up by voluminous evidence that shows that weaknesses in institutions have stifled investment and development in developing countries (see Loayza et al., 2007; Saleh, 2004; Everhart and Sumlinski, 2001).

[4]These leaders also are claimed to have collaborated with government officials, private individuals and the multinational companies in the stealing of resources from their economies (see Ayattey,1992)

[5]This political corruption scandal was reported by the IMF and by Human Rights Watch, and was subsequently acknowledged by the Angolan government. US$32 billion in oil revenue (a quarter of Angola's GDP) could not be accounted for. The clue to what might have happened was revealed from a 2010 US senate report into corruption and money laundering which found Aguinaldo Jaime, who served as the governor of the National Bank of Angola from 1999 to 2002 initiated a series of suspicious US$50 million transactions with US banks. This was done in collaboration with senior members of parliament and ministers in the government.

[6]This scandal was reported in Malawi in October 2013 and led president Joyce Banda to sack those ministers who were allegedly connected to misuse of office.

[7]Moi ruled Kenya for 2.5 decades, Mobutu ruled DRC for 3.2 decades and Felix Houphouet-Boigny ruled the Ivory Coast for 3 decades. Acemoglu et al. (2004) have argued that these leaders manage to maintain power because of their divide and rule strategy.

phenomenon that remains a puzzle.This seems to contradict the claim that the populace has the defacto political power to change the status quo if their social wellbeing is undermined (Acemoglu and Robinson, 2012). Yet, the question is why does the populace not revolt against such leaders?

Given the foregoing incidences of political corruption involving senior officials, it becomes difficult to accept the Neoclassical view on the causes of these flows. This view is complicated by the fact that a number of African countries have achieved macroeconomic stability (low inflation, a stable exchange rate. They have sustainable fiscal deficits) reduced other macroeconomic policy distortions-high debt levels and deficits following financial liberalization. The rates of return from the African countries also appear larger than those observed in the developed and industrialized countries (Montiel and Serven, 2006). Here the logic is simple. If the neoclassical view was the best explanation for illicit financial flows from the African continent, then the attainment of macroeconomic stability and relatively favourable rates of return in these countries should have reduced economic risk with subsequent reduction in capital outflows.Yet corruption and debt fueled capital outflows have continued to characterize these countries. At the same time, if African countries are regarded as risky environments for investment, then foreign lenders should not to lend their money to African governments, yet they have continued to do so (Ndikumane and Boyce, 2011). So where does this leave us?

This paper explores the political economy view as an alternative explanation to the illicit financial outflows for one African country-Kenya. It aims to specifically answer two related questions: Why has Kenya continued to be characterized by corruption and debt fueled capital outflows, although these stifle its economic development. Are these outflows a result of weaknesses in political institutions that do not constrain the powers of the executive and that have allowed maximum rent extraction? These questions remain very pertinent not only for Kenya but for other developing countries that are faced with the development challenge of debt fueled illicit capital outflows. To this end, this study assesses empirically the role of increasing powers of the executive as a proxy for the influence of political institutions on illicit financial outflows. The evidence

from this exercise supports the view that increasing executive powers is positively associated with illicit financial outflows. Thus weaknesses in political institutions matter for illicit financial flows (rent extraction) from Kenya. As robustness checks, this research uses constraints on the executive from Polity IV Indicators as an alternative indicator of institutions. Using these alternative indicators, the study finds a strong support that constraining the executives powers is likely to reduce the magnitude of illicit financial flows from Kenya.

Kenya becomes a particularly interesting ground on which to test the influence of political institutions on illicit capital outflows for a number of reasons. First, for the past four decades of the post independence period the country has faced high corruption levels and rent seeking sustained by an entrenched system of political patronage[8]. There is also some evidence of several incidences of the reported grand corruption scandals involving the transfer of illicit money by the ruling political elites from the late 1970s to the early 21st century. Second, corruption and the illicit capital outflows from Kenya have been a cause for a concern for a number of ordinary Kenyans who remain poor despite the increasing debt acquired in their names by the ruling political elites. Illicit capital outflows and corruption are claimed to have depleted the already meager public resources and led to sub-optimal investment, and rising debt levels, and undermined tax moral accountability between citizens and the State. They have also added to the growing horizontal inequality within the country (Lazzeri, 2012).

This paper does not aim to provide a comprehensive view of the determinants of illicit financial flows from Kenya or a review of the political economy of Kenya. Thus, the discussions provided in this paper are meant to complement rather than be an alternative to the general economic explanations provided elsewhere (see Collier et al., 2001; Dornbusch, 1990; Cuddington, 1986, for competing explanations).

The study fills the existing gap in the literature on the relationship between political institutions, rent seeking and illicit capital outflows from developing countries using Kenya as a case study. To

[8]In 2012, the KPMG report shows that Kenya remains among the top four countries in Africa which have the highest corruption levels

the best of the author's knowledge no study has attempted to demonstrate the influence of increasing powers of the executive on illicit capital flows from Kenya. The only study that has attempted to examine the factors that influence illicit financial outflows from Kenya is that byNg'eno (2000). However, that study used the Neo-classical framework and equated illicit capital flows to capital flight. It largely ignored the political economy and institutional explanations of such flows. It further ignored the changing political context within which capital flight has occurred in Kenya. This paper therefore fills in this research gap.

This paper is closely related to the papers that attempt to understand capital flight and corruption from Africa. These include those by Yalta and Yalta (2012); Ndikumana and Boyce (2011); Ali and Walters (2011); Fofack and Ndikumana (2010); Ndikumana and Boyce (2008); Cerra et al. (2008); Ndikumana and Boyce (2003); Boyce and Ndikumana (2001); Lensink et al. (1998); Ajayi (1995). The paper is also related to the papers on the political economy of corruption and the new institutional economics such as Acemoglu et al. (2004, 2003); Alesina and Tabellini (1989). The rest of the Chapter is organized as follows: Section 2 provides historical context and the stylized facts on illicit financial flows and the state of institutions in Kenya. Section 3 presents a review of the related literature on illicit financial flows. Section 4 provides an econometric estimation framework and section 5 presents the results and discussions. The final section provides concluding remarks and policy implications.

5.2 Historical Context and the Stylized Facts

Similar to other African countries, Kenya continues to lose billions of dollars annually as government officials, individuals and corporations stash illegally acquired funds in highly secretive foreign banks abroad. For instance, during the past four decades of the post independence period, it is estimated that the country lost over US$6.369 billion in accumulated illicit financial flows (Kar and Cartwright-Smith, 2008). Between 2000-2006, it is alleged that it lost on average US$686 million per year-a figure that is above the total Net Official Development Assistance it

received, which for the year 2005 was estimated at US$652 million (Kar and Cartwright-Smith, 2008). This section discusses the evolution of this problem through the lenses of the political economy. It shows how politicians holding defacto political power dismantle the institutions of accountability in order to extract resources from the economy. At the same time, it accounts how politicians following such dismantling of institutions establish patronage system of public goods provision in order to intensify the collective action problem and remain in power and extract resources from the economy. These section lists salient features underlying corruption and illicit financial flows from the political economy framework.

5.2.1 Dismantling Checks and Balances and the evolution of Corruption in the Kenyan State

The Kenyatta Regime

At independence in 1963, Kenya inherited a colonial model of governance with the strongly centralized state and a dominant executive. The Kenyatta administration did not change the status-quo but dismantled the bicameral legislative system established under the Lancaster Constitution of 1962, that was meant to provide an effective system of checks and balances and accountability in government (Slade, 1975)[9]. In 1964, Kenya became a republic with unicameral form of government in which all executive powers were vested in the president. These included the powers to appoint and dismiss judges, including the Chief Justice, as well as Accountant General, Public Service Commissioner and other important executive branches of government[10]. This abolished the separation of powers between the judiciary, the legislature and the executive. Arguably this was the most significant move in which the new elites had chosen to deviate from the model set up by their colonial mentors, and assert their own interest[11]. The consequences was rampant political corruption of the executive and the whole system of government, as will be demonstrated shortly.

[9] This was done through the Constitution of Kenya (Amendment) (No.1) Act No. 28 of 1964

[10] see the Constitution of Kenya (Amendment) (No.2) Act No. 28 of 1964

[11] Hornsby (2013) argues that this was a complete capture of the state by Jomo Kenyatta and his allies in 1962-65 and it is the single most important factor in understanding Kenya's subsequent trajectory.

After dismantling the system of checks and balances, the president was no longer answerable to parliament. From that time on, he was no longer to be voted for parliament[12]. Mueller (2008) notes that parliament became little more than a rubber stamp for the executive. Clearly this was a strategic move in which Kenyatta established the patrimonial state that would benefit him and his entourage of elites. Following these constitutional alterations, Kenyatta established informal patron-client networks, where clients were rewarded not only with land that had been vacated by the then departing European settlers but also with state contracts that often inflated prices to extract resources from government. It was during the same period that the Public Service Structure and Remuneration Commission (PSRC) set up by the president recommended that civil servants also could engage in private business. This recommendation is credited as giving legitimacy to official corruption in the country(Loughran, 2010; Odhiambo-Mbai, 2003). Businesses owned by public servants and ministers started to trade with the government they were serving. This was an obvious conflict of interest and it enabled the siphoning of state resources for personal gain(Waithima, 2011). Part of the siphoned state resources by ministers was recycled as handouts to their constituencies, glorified as "harambee[13]"(Hornsby, 2013).

Slowly an African business elite, predominantly from Kenyatta ethnic group-the Kikuyus, emerged alongside businessmen of Indian originHornsby (2013). By the 1970s, it became evident that the system of clientilism, corruption and connections, fueled by poverty and politics was well established, entwined with and running beneath the formal process of government. Hornsby (2013) argues persuasively that for these early years of independence the wealth of the state was "free money" to be seized by those who were able to do so. Public sector positions which had been vacated by the outgoing European settlers were up for grabs-most of which were filled by people from the Kikuyu ethnic group. It was therefore not very difficult for Kenyatta to buy support and appease his constituencies-particularly his own Kikuyu community. As he himself claimed at one time when he went to Gem constituency in Nyanza in an attempt to win back the opposition,

[12]see the Constitution of Kenya (Amendment) (No. 2) Act No. 16 of 1968

[13]This was a local name for self help programs established at village level and received financing from the contributions of its members. However, this was misused as a political vessel for politicians who used it to win votes. Harambee contributions were no longer just enforced on the citizens but they almost became a prerequisite for businessmen getting government contracts especially if the harambee was presided over by politicians (Chweya, 2005).

"Kenyatta has the sugar, ... go lick his hands"[14]. However, Odhiambo-Mbai (2003) posits that within the Kikuyu community, government jobs were given mainly to relatives of in power. This clientelistic distribution of resources made it difficult for people to resist state corruption. The result was resentments, particularly from the Luo ethnic group, that the non-Kikuyu were not given a share of the jobs in the leadership commensurate with their representation in the population.

In 1975, the presidential committee chaired by Waruhiu S.N. to investigate the state of the public service confirmed grand corruption and illicit financial flows arising from extraction of the state resources. The committee stated that[15],

> *"We have received overwhelming evidence to the effect that some public servants utilize government facilities in order to benefit themselves. Some are said to tender for government supplies, and to see to it that their tenders are always successful. Others are said to be in the habit of accepting rewards for work that they are paid to do by the government. We have been told that most salesmen particularly in the field of the now popular turn-key projects offer reward to public servants who thus become obliged to see that decisions are made in favour of those who offer rewards. It has also been suggested that in the field of purchasing, commissions are paid into bank accounts maintained by Public Servants abroad. Reward for work that the public servant is already paid to do and receiving bribes are acts of wanton corruption (Gok, 1980: Waruhiu Committee Report, 1980, 103.)"*

Kenyatta used the patronage system and predation of state resources as a political strategy for maintaining state cohesion. He also used preventive detention to repress the political opposition, and the harnessed the security forces to disrupt political rallies (Geir Sundet and Moen, 2009; Mueller, 2008).

In general, corruption leading to capital flight under Kenyatta's regime was the result of three related but distinct ways in which Kenyatta failed to create a functioning and effective system of governance. First, the dismantling of checks and balances. Second, the dominance of patron-clientilism. Third, the personalization and ethnicization of decision making in which deliberately

[14]Quotation from field notes of Malcolm Valentine, cited in Mueller (2008)
[15]This quote that follows appears in Odhiambo-Mbai (2003)

opaque processes concealed self-interested decision making, and the predation of the state resources. Branch and Cheeseman (2008) call this regime the "bureaucratic-executive" state that establishes all powerful president who dominated Kenyan political life after independence. They maintain that this state rested on the collusion of elites determined to protect the highly unequal post-colonial settlement on which their wealth depended.

Moi's Regime

In 1978, following the death of President Kenyatta, the political power shifted to Daniel Arap Moi who was a member of the Kalenjin ethnic group but who had served in Kenyatta's administration as the deputy president since independence[16]. Moi inherited a civil service bureaucracy that was corrupt and not accountable. His accession to power was followed by a period of growing tension that culminated in the 1982 economic crises. "He also faced a recalcitrant Kikuyu elite, who had tried to overthrow him before he took office, Kalenjin supporters who wanted to 'eat', and a growing population waiting for perks (Mueller, 2008)". Given these challenges, his long term strategy was not to change the patrimonial state and the patronage system established by Kenyatta, but rather to reinforce it. He used it for his own benefit and intensified the collective action problem through further clientilistic distribution of state resources and state repression tools as a way to retain power.

Moi lacked sizable ethnic political base since he came from a smaller ethnic group-the Luo. He also faced adverse macroeconomic circumstances.His first step to consolidate political control was to buy support through patronage financed through predation of the state's resources. He also attempted to weaken his enemies through deliberate draconian penalties: torture, detentions without trial, and state repression. Following the failed coup attempt in 1982, he passed numerous constitutional amendments, including Section 2A of the constitution which turned Kenya into a de-jure one-party state[17]. This hastily passed constitutional amendment outlawed ethnic welfare organizations, the most powerful of which had been the Kikuyu, Embu and Meru Association

[16]This group was smaller in numbers than the Kikuyu group
[17] By 1991, the constitution had been amended about 32 times

(KEMA). These organization were seen to be hostile to his regime(Geir Sundet and Moen, 2009). Moi's rules created a '***culture of fear***',(Gimode, 2007). These rules were a further 'breakdown of constitutional checks and balances', and the judiciary became an appendage of the executive (Mueller, 2008).

Branch and Cheeseman (2008) support that the view that Moi's strategy of using the state resources to maintain his network of patronage was partly made possible through the "informalisation" of the state characterized by looting of the state resources. However, Robert Bates (2008) in his recent framework notes that this strategy is "the long road to disorder". He argues that it begins with a decision by the executive to adopt an increasingly predatory stance, itself triggered by some combination of falling public revenues and increased political uncertainty. Moi's strategy of looting the nation became even more intense when the country faced political liberalization since it made him feel more uncertain about his future political victory.

Uncertainty about his future political term in office led him to further weaken the control institutions, such as the judiciary, the auditor general, and the systems of financial management. Increasingly, the Presidency took on extra powers. This was a deliberate strategy to maintain control and to ensure that the President could maneuver as he wished, unencumbered by external controls. State institutions were increasingly seen as serving the country's elite rather than the people. Political patronage was pursued through public service employment, the sale of parastatals, and grand corruption in public procurement and financial management[18].

In the early 1990s, it became evident the large and valuable assets of the state were being exploited by those who held of political power. Hornsby (2013) shows that access to the resources that the state commanded and the ability to direct them for personal gain and political purposes was in fact a fundamental driver for competitive politics in Kenya at that time. Most people had the notion that if they acceded to power, they could use the state resources for their personal benefit. State resources were increasingly diverted into the off-book sector of the economy in which insiders

[18]This also included the allocation of public land often in protected forests and public areas like urban parks and reserved land

extracted resources from the state for private benefits via bribery, abuses of procurement and perks in office. Most ministers, senior politicians and civil servants became wealthy through the abuse of their privilege to take government loans without repayment and receive payment in return for their political support (see Hornsby, 2013; Berman and Lonsdale, 1992).

It is probable that the legitimacy of the state was higher under Kenyatta because of the general perception of Kenyatta as the founding father of the nation but also because political awareness had risen by Moi's time.

Kibaki's Regime

In 2002, following the 24 year rule of President Daniel Arap Moi, Mwai Kibaki, who had served in both Kenyatta's and Moi's administrations, was elected to the presidency. He was elected on an anti-corruption platform with the hope of ending corruption that then permeated every sector of the country. In 2002 after taking office President Kibaki engaged Kroll and Associates (UK)- a private investigation and security firm, to investigate the allegations made by Transparency International that over 3 billion US Dollars was stashed abroad by the Moi administration and its closest associates[19] (Mwakio, y 19).

The report by Kroll and Associates (UK) then revealed more corruption perpetrated during Moi's regime[20]. These scandals raised intense concern among the people of Kenya, and let assertions that foreign Aid had been used to finance capital flight by Moi's regime and its political associates. The pressure for Kibaki to embark on the fight against corruption was also propelled by the economic challenges his government was facing, in particular, the balance of payments crisis that hit the economy time and again. Given these challenges, the Government accepted for the first time that capital flight was a problem in Kenya but disputed its magnitude (Ng'eno, 2000).

[19]See, for instance, "State Changes Tune on Looted Billions Abroad", http://www.globalpolicy.org/nations/launder/regions/2005/

[20]The full KTM report can be viewed at http://wikileaks.org/wiki/The looting of Kenya under President Moi. The famous corruption scandals that involved capital flight from Kenya include: (1) *Goldenberg Scandal*, this was political scandal where the Kenyan government was found to have allegedly subsidized exports of gold far beyond standard arrangements during the 1990s, by paying the Goldenberg International company 35% more (in Kenyan shillings) than their foreign currency earnings. Although it appears that the scheme was intended to earn hard currency for the country, it is estimated to have cost Kenya the equivalent of more than 10% of the country's annual Gross Domestic Product and that no or minimal amounts of gold were actually exported, (2)

In response to these challenges, Kibaki's Administration embarked on several anti-corruption strategies. For instance, the provision of one month amnesty for holders of foreign assets to entice them to repatriate their foreign holdings; the establishment of the anti-corruption authority and the enactment of the Anti-Corruption and Economic Crime Act and the Public Officer Ethics Act that required all public officers to declare their wealth. These early initiatives met with little success as public servants refused to declare their assets unless the politicians were required to do the same. In 2005, evidence grew that, despite its rhetoric, Kibaki's administration had adopted the same kleptocratic attitude to state funds as its predecessors. A number of corruption scandals that involved the looting of government resources tarnished his administration's reputation. An example was the Anglo-Leasing contract in which the country lost Ksh56 billion (nearly 4.38% of the country's 2004 GDP) through inflated prices and non executed contracts on passport deals entered into between the Home Affairs Ministry and the British lease finance company-Anglo Leasing. This was a serious blow to Kibaki's regime as it led to more scrutiny into more questionable contracts involving a number of his cabinet ministers (Wahome, 2007)[21].

President Kibaki's second term in office from 2008, witnessed further corruption scandals that were greater than the scandals committed during previous regimes (Waithima, 2011). For instance, the Triton oil scandal in which Kenya lost 7.6 billion shillings[22], the maize scandal in which the government lost Khs150 million, the free primary education scandal in which the government lost Khs 4.2 billion, the Navy ship scandal in which Khs 4.6 billion was lost and the fertilizer scandal in which the government lost Khs4.3 billion, to name but a few[23].

It became apparent that a number of contracts entered into between the government of Kenya and companies in which government officials and ministers were shareholders were designed to benefit the political elites and to finance election campaigns (Hornsby, 2013). Donors were infuriated by the discovery that while the Kenyan government was begging for aid, it appeared to be

[21] It was noted that half of the people involved in this scandal were senior members of the ruling party and half were members of KANU

[22] The Triton case involved the government through the Kenya pipeline company and the Triton company. Correct procurement procedures were not followed resulting in the government losing billions in the process (see Daily Nations of January, 11 2009).

[23] See full details of these scandals in Waithima (2011)

stealing sums of a similar size to the entire aid budget. It was for this reason that in 2005, virtually every foreign embassy criticized the government openly over corruption. Hornsby (2013) notes that by that time, half of the Cabinet had been named in corruption allegations. If corruption and rent extraction were commonplace in Kenya, why did Kenya people continue to support corrupt leaders? This question is difficult to answer but perhaps one could derive some hint from John Githongo's[24] quote provided below that sometimes people support corrupt leaders because they would benefit from the system. Githongo's quote reflects clearly that people object to corruption if it does not benefit them. If they benefit, however they will support corrupt leaders.This justifies the earlier argument that in Kenya, people supported their leaders because of patronage provision of public goods which, is commonly known as vote buying ("carrot") in Kenya.

> *...the post independence patrimonial state has disbursed resources to favour a ruling "minority". When the political traumas of the post-independence era are overlaid on these economic realities driven by patronage it creates particularly potent perceptions of inequality among ethnic groups...it's not the corruption in itself that people object to but the fact that it is perpetrated predominantly by an elite from one ethnic group to the exclusion of others (Githongo, 2006,20-1).*

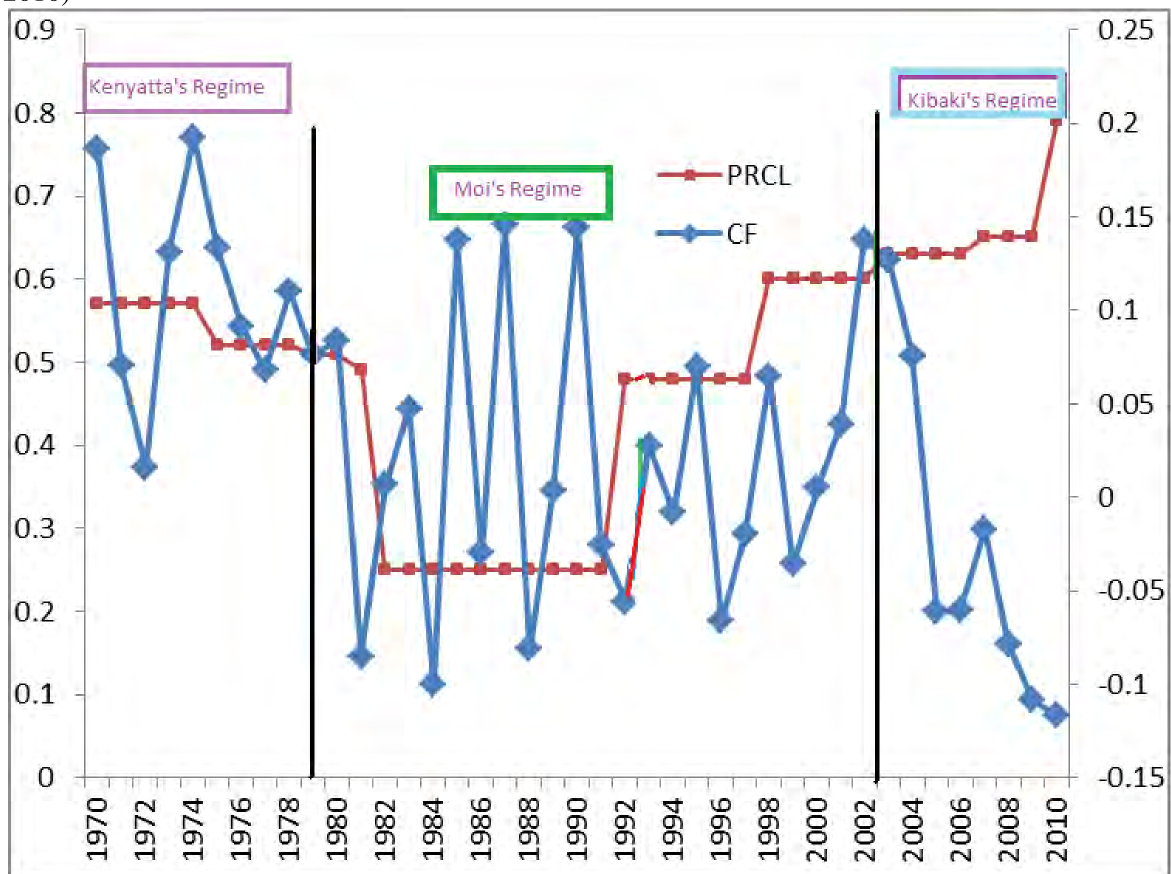
5.2.2 Illicit Financial Flows and the Regime Change

Figure (5.1) plots illicit financial flows and political rights and civil liberties during the three political regimes in Kenya. Political rights and civil liberties are used here as a measure of political institutions and commitment to enforcement of the rule of law. The two vertical solid lines represent political transitions in the economy. The first line represents the December 1969 transition from democracy to autocracy, while the second line represents the December 1992 return to democracy. During the first regime, although illicit financial flows seems to have started to decline, corruption was increasing, as discussed in the foregoing section. It was during this period that civillians' civil liberties and political rights were being eroded. At the same time the Executive had already vested itself with overwhelming powers. Many checks and balances had

[24]John Githongo was formerly head of Kenya's anti-corruption agency who was exiled after exposing graft at the highest levels involving top politicians and government ministers.

already been dismantled. The transition from the first regime to the second regime under Moi's presidency did not bring any positive change in the state of institutions of accountability. The country became autocratic with further dismantling of checks and balances and an increase in the powers of the president.

Figure 5.1: Real Illicit Financial Flows in Constant 2010 Prices and Institutions in Kenya (1970-2010)



source: Author's computation

Figure (5.1) shows that between 1984 and 1990 illicit financial flows were highest and during that period political institution were weak, as reflected by low levels of civil liberties and political rights protection. During the same period, other organs of government lost their independence and the state took control of the media, further sacrificing government accountability.In 1992 the economy returned to a multi-party system of governance and introduced a number of macroeco-

nomic reforms, but corruption and the illicit financial flows did not cease. Moi's regime continued rent extraction of state resources. Corruption scandals were revealed after 2002 during Kibaki's regime. Even during Kibaki's regime corruption and illicit financial flows did not cease although political institutions (civil liberties and political rights) improved slightly . The increase in political rights and media freedom, as well as the declining powers of the Executive, are associated with declines in the level of capital flight (see Figure (5.1))

5.3 Review of Related Literature

5.3.1 The Neoclassical View of Capital Flight

The Neoclassical literature (henceforth the conventional view) views illicit financial flows (capital flight) to be a result of portfolio choice decisions by utility optimizing agents. From this free market based premises, capital flight is seen as a response to changes in an individual's portfolio bundle arising from the standard risk diversification motive by domestic investors or economic agents. Two other important incentives are included as explanations: Relative risk incentives and return differentials(Collier et al., 2001; Sheets, 1995).

Relative risk incentive involves counter-factual comparison of the after tax domestic and foreign returns and is adjusted for factors such as expected depreciation, volatility of returns, liquidity premiums, potentially higher taxes or perceived lower returns at home, and other indicators of investment risk. From this comparison the net returns are usually claimed to be higher abroad because of the differences between domestic taxes and taxes abroad. That is, expected currency depreciation at home which affects returns, and the higher economic risk. The latter results from the greater volatility of returns in developing countries. This conventional wisdom further claims that capital flight is caused by the existence of market distortions and asymmetric risks in developing countries relative to advanced countries.

Domestic market distortions embraced in this market based theory include the features of the

economy that disrupt prices as the mechanism for resource allocation. These reduce expected returns to assets. They include: the exchange rate misalignment (both an overvaluation or an undervaluation), government fiscal deficits and high debt levels. Other features of the economy that can affect returns to assets include high inflation levels, government policy intervention in markets through price controls and rent seeking, and politically motivated expropriation of assets and confiscatory taxation.

According to the Neoclassical model, if a currency depreciation is expected, domestic wealth owners will shift their wealth out of domestic assets holdings into foreign assets holdings. Using the Interest Parity Condition (IPC), this model shows that depreciation of local currency makes foreign assets more attractive while domestic assets are expected to decline in value. Alternatively, an appreciation of foreign currency makes foreign assets more attractive and results in loss of value for domestic assets. This thereby motivates investors to hold foreign assets. At the same time, if domestic currency is overvalued, economic agents will expect the currency to be devalued in the future. Holding firm to this expectation, economic agents will attempt to avoid potential capital loss by converting their assets into foreign claims. This would then increase capital flight (Khan and Ajayi, 2000; Khan and Haque, 1985; Alesina and Tabellini, 1989).

Similarly, high inflation rates which sometimes result from fiscal deficit financing through seignorage will lead to capital flight. Under the circumstances of high inflation pressures, domestic agents engage in capital flight to avoid erosion of the value of their monetary balances by inflation. Even when fiscal deficits are financed through bond sales, domestic residents may still expect that, at some future date, their tax liabilities may increase as the government attempts to coerce them to pay for the national debt. This will encourage domestic investors to move their assets to foreign countries to again avoid potential tax liabilities again (Ajayi, 1995). Ize and Ortiz (1987) formalize the link between deficit financing and capital flight. These authors show that capital flight is related to the overall financial solvency of a government, and that insolvency and default risks created by fiscal deficit appear to be explicit determinants of capital flight.

Therefore the standard economic development models that analyze capital flight based on the

neoclassical portfolio choice theory assume that: (1) economic behaviour relevant to capital flight is correctly described by the expected utility maximization, (2) markets exist and are distorted, (3) individuals agents possess the ability to compute the probabilities of investment risk globally and on the basis of counter-factual investment models, and (4) computable probabilities can be attached to all events (Blankenburg and Khan, 2012). The first policy implications from the analysis of capital flight using these models suggests that movement of capital seeking highest risk adjusted returns should not be a concern for policy makers in developing countries if risks is to be hedged. The second policy implication is that domestic market friendly reforms that correct any market dis-equilibrating distortions, stabilize currencies, promote investment opportunities and reduce asymmetric investment risks should reduce capital flight. Thus, capital flight should actually not exist if "rational" economic policies are implemented by the government (Jain, 1988).

5.3.2 Capital Flight and Social Controls

Empirical evidence from African countries seems to contradict the main predictions of the standard portfolio choice theory. For instance, Ndikumane and Boyce (2011) empirically find no statistically significant effect of the interest rate differential on capital flight from Africa. These authors conclude therefore that capital flight from African countries can not be adequately explained by conventional portfolio choice theory and there is a need for more nuanced explanations. Blankenburg and Khan (2012) see capital flight as a result of the social controls in developing countries. That is, capital flight is a result of agent's motive to escape social controls of government. The social controls approach rests on the premise that individual control over capital is rarely absolute or uncontested, but rather subject to social constraints-the character and extent of which vary through time. The approach identifies governments as key players in social control, and the underlying developmental model based on the social control approach is that of a mixed economy or a welfare/developmental state with social interventions outside the market sphere.

The central policy implication from the social control theory with regard to control of capital flight is not simply the promotion of markets. Rather it advocates the strengthening of existing

social controls or the introduction of alternative, more effective administrative measures to control private capital movements. The social control theory in principle builds on the portfolio choice theory. However, it does not provide any evidence on the effectiveness of each government control. Nor does it provide solutions in cases the government itself, through political elites, is the one involved in looting money out of the economy. Social control theory comes closer to the portfolio choice approach, although it recognizes capital flight as an "inherently political phenomenon" and a prerogative of those who are wealthy with access to foreign exchange (Epstein, 2005). The social control theory and the portfolio choice theory only point towards causes of capital flight. They fail fail to show why policy distortions and social controls are weak in developing countries in general.

5.3.3 The Political Economy View of Illicit Financial Flows and Corruption

According to the political economy literature, illicit financial flows are the result of rent extraction by unconstrained corrupt practices of political rulers and their elite groups. These rulers and elites know that even if they accumulate foreign debt, they will not inherit this the burden which will be placed on future (possibly rival) regimes(see for example Alesina and Tabellini, 1989). The literature argues this because under an environment characterized by weak political institutions political actors have discretionary political powers. These discretionary powers allow them authority to design and administer regulations and policies in a discretionary manner. The central argument raised by this literature is that the exploitation of discretionary power is enabled by weak political, administrative and legal institutions (Aidt, 2003; Andvig et al., 2001; Bardhan, 1997).

This literature argues capital flight arises through the desire to hide illegally accumulated wealth abroad and not necessarily due to interest rate differentials between countries or macroeconomic policy distortions as postulated under the neoclassical approach (Kar and Cartwright-Smith, 2008, 2010; Heggstad and Fjeldstad, 2010). This literature explains the revolving door hypothesis (the situation in which foreign debt and capital flight are highly correlated) as the result of extraction

of resources by elite groups who loot their countries and conceal the proceeds abroad[25]. Thus, capital flight from African countries can be understood to be a result of corruption by African leaders and the politically connected elites.

However, the claims made above do not provide explanations as to why political leaders who extract resources from their economies continue to command significant support from their zitizens. Second, why are such leaders not accountable to their electorate? The models of electoral accountability take into account the financial rent seeking motives of political actors. These models predict that political elites may extract rents up to a level just acceptable to a simple majority. This prediction implies that a majority of voters in countries with high corruption levels and capital flight find them acceptable despite huge the welfare losses such corruption imposes. Because if they were not acceptable, the majority vote would punish such political actors by not voting them to power during elections under democratic governments. The continued reign of corrupt political leaders for decades without any challenge from the populace implies that indeed corruption in the form of looting is acceptable to the majority.

An alternative explanation for the simultaneous existence of corruption, capital flight and continued political power is that these political leaders do not come to power through legitimate means. That is, they dismantle electoral processes and all other checks and balances. Thus they are able to loot country resources which often escape jurisdiction as capital flight. Political actors often hide money in secret jurisdictions because their opponents may expropriate their assets if the opponents come to power. This is made possible because a large amount of the resource accumulation may have been illegally acquired. In other-words such accumulation might have violated the structure of formal laws. Under such circumstances, the legality of resource acquisition can be questioned by incoming rulers for various motives, including expeditious political reasons. For instance, to undermine the ability of previous ruling factions to return to power.

[25]It is on the basis of this literature that the view that a large portion of foreign debt (public loans) from Africa has been used to finance capital flight out of the continent as private wealth by the ruling elites groups finds support. In many empirical studies, these funds have been shown to escape from the public purse through looting and have been found to be as high as 80 percent of public loans in some countries (Ndikumana and Boyce, 2010, 2008; Cerra et al., 2008; Khan and Ajayi, 2000).

The political economy view of corruption and capital flight is in line with the general thesis advanced by the new institutional economic literature regarding the lack of economic development in developing countries in general (Acemoglu et al., 2003, 2001; North, 1990, 1987b; Sachs et al., 1995; Rodrik et al., 2002). This thesis ascribes bad economic outcomes and lack of economic development thereof, to the extractive political institutions. In this context, extractive political institutions refer to those institutions that do not constrain political leaders and their elite groups; that concentrate power in the hands of a few, and that do not provide checks and balances or the "rule of law". These institutions are claimed to have led to pervasive rent seeking to the detriment of economic development(Acemoglu et al., 2004, 2003; Rodrik et al., 2002; Clague et al., 1996; Sachs et al., 1995)[26]. This thesis is backed up by evidence that shows that weaknesses in institutions have stifled investment and development in developing countries (Loayza et al., 2007; Saleh, 2004; Everhart and Sumlinski, 2001).

The institutional economics strand of literature finds support from Ali and Walters (2011) who show that capital flight from Sub-Saharan Africa is explained by institutional factors. In particular, these authors show that once they control for structural features, private capital outflows from Sub-Saharan Africa is explained by factors beyond macroeconomic policy distortions. Thus they rule out as sole causes institutional features of the individual economies and poor profitability of investment. In a recent study examining selected developing countries, Cerra et al. (2008) provide further empirical evidence to corroborate the notion that indeed macroeconomic policy distortions alone cannot fully explain capital flight from developing countries. For instance, Cerra et al. (2008) show that countries with a poor track record of macroeconomic fundamentals may also have weak institutions. Therefore, capital flight from these countries may be a by-product of redistributive policy tools designed by a greedy and weakly constrained executives. These arguments are supported by Cheung and Qian (2010) who show that China's capital flight is explained in principle by the history of the economy.

The latter two strands of literature conclude that explanations for capital flight provided by the

[26]These claims are backed up by evidence that shows that weaknesses in institutions have stifled investment and development in developing countries (see Loayza et al., 2007; Saleh, 2004; Everhart and Sumlinski, 2001).

conventional economic literature make no systematic distinction between the drivers of asymmetric investment risks in developing countries. Second, it conflates short-term utility maximization with structural, political, and economic uncertainties in these countries. This is accomplished by focusing on a single motive for capital flight, namely the investor's utility maximization in the presence of differential policy regimes and investment risks. Thus the failure of conventional wisdom to explain such flows weakens the effectiveness of the policy advice to deal with capital flight from the developing world (Blankenburg and Khan, 2012).

The policy implication advanced by these latter contributions in literature is that to reduce such flows one should focus on mechanisms to address the underlying problems. These problems include corruption and tax evasion, and capital flight is only a manifestation of these problems. The creation of the right economic environment includes strengthening the rule of law, electoral accountability, contract enforcement and property rights protection for agents in the economy. These actions are seen as a solution to retain capital domestically and achieve development (Acemoglu et al., 2001; Alfaro et al., 2007; Shirley, 2008; Kant, 1996; Khan and Haque, 1985). Further implications are that macroeconomic policy distortions seen as drivers of capital flight are themselves the result of bad policies chosen by the ruling elites for their own benefit under weakly-institutionalized polities. Thus bad policies are only a symptom of weaknesses in institutions(Acemoglu et al., 2003; Loayza et al., 2007; Fatas and Mihov, 2005).

5.4 Econometric Framework

5.4.1 The Baseline Empirical Model

The key testable hypothesis from our theoretical discussions in the foregoing section is that the amount of capital flight depends on the state of institutions in the economy. To test this hypothesis, we estimate the following baseline Autoregressive Distributed Lag (ARDL) econometric specification:

$$\kappa_t = \alpha + \sum_{i}^{p} \beta_i \kappa_{t-i} + \sum_{i}^{q} \theta_i Institutions_{t-i} + \varepsilon_t \tag{5.1}$$

where κ_t is the stock of the illicit financial flows expressed as a ratio of GDP in constant prices; κ_{t-i} is the past stocks of the illicit financial flows scaled by GDP and this variable measures the persistence of such flows; $institutions_{t-i}$ is the measure of the state of institutions proxied by the "Extent of the Arbitrary Executive Power". Equation 5.1 in essence captures the causal effect of increasing arbitrary executive powers on capital flight. The coefficient (θ_i) gives the change in capital flight resulting from a unit change in the extent of the arbitrary executive powers. The choice of this model is based on the desire to capture the persistence of capital flight as argued in the development literature (see also Brada et al., 2013; Ndikumana and Boyce, 2003; Fofack and Ndikumana, 2010; Cuddington, 1986). This is captured by the lagged values of the illicit financial flows (κ_{t-i}) variable on the right hand site of equation (5.1). The "the persistence of the illicit financial flows" in this context implies that the past levels of such flows have effect on the current levels (see Lan et al., 2010; Cheung and Qian, 2010). Brada et al. (2013) argue that the inclusion of the lagged illicit capital variable in a dynamic model could also be interpreted as capturing the sunk costs of developing ways of moving capital offshore. Once these costs are paid, it makes sense to take advantage of the resulting conduits for capital flight on an ongoing basis. .

Although the empirical strategy used in this research is similar to that used by Lan et al. (2010); Cheung and Qian (2010), it differs because it is based on the political economy theory of capital flight discussed in the previous sections. Those authors' approach was based purely on the portfolio choice theory. Intuitively in their model an economy tends to experience capital flight due to a persistent return differential net of transaction costs which is possible in the presence of capital controls. Here, however capital flight is modeled as a function of political factors over and above the simple interest rate differential in the absence of capital control.

Control Variables

In order to obtain the net effect of the impact of political institutions on illicit financial flows, the study controls for other factors including those suggested by the Neoclassical economic theory as determinants of developing countries' capital outflows. Lan et al. (2010) notes that although equation (5.1) represents the simplistic way of modeling capital flight, the absence of other variables to explain this phenomenon could bias the results obtained from such an equation. Standard practice from the economic literature of adding these variables one at a time is adopted, following Lan et al. (2010); Cheung and Qian (2010). These additional variables serve both as control variables and robustness checks of the baseline results.

These control variables are divided into three categories: The variables that are related to the portfolio motive, those that are related to macroeconomic policy management, and those that are related to the financial development of the country. Some explanation is required as to what exactly they are meant to control for in the standard regression model. First, real GDP growth is meant to capture the availability of domestic investment opportunities in the economy. As in literature, outflows of capital from developing countries could be a result of the absence of investment opportunities in the domestic economy(Brada et al., 2013). This variable also measures the prospects for growth in the economy as well as income levels which induce demand for goods, and therefore investment. If GDP growth is sluggish, then capital is bound to leave the economy in search of higher investment opportunities elsewhere (Lan et al., 2010; Ndikumana and Boyce, 2003). This variable therefore is related directly to the portfolio motive of capital outflows. The other variables that are meant to capture the portfolio motive are the real interest rate differential and real exchange rates which both measure the benefits of higher returns abroad.

For the macroeconomic policy management, we use inflation rate and the current account deficit (Harrigan et al., 2002; Hermes and Lensink, 2001). The inflation rate is expected to reduce expected future returns, and therefore must be positively related to capital flight. While the current account deficit may reflect sustainability of the exchange rates and captures macroeconomic imbalances. The deficit could fuel capital flight, and it is expected to be positively related to capital flight (Hermes and Lensink, 2001). The size of government might signal the possibility that

government taxation may be increased in future, and cause capital flight. This is therefore used as a macroeconomic management variable since we do not have data on fiscal deficit(see also Ali and Walters, 2011).

Short term debt is used to capture sources of capital flight and to control for the phenomenon known as the revolving door hypothesis or debt fueled capital flight. This is a situation under which an increase in foreign debt, particularly public sector debt, is accompanied by a corresponding increase in capital flight. This is well documented in Ndikumana and Boyce (2003) for a sample of 30 sub-Saharan African countries.

Finally, we control for financial development by using a financial deepening indicator measured by broad money supply as a ratio of gross domestic product, the amount of the domestic credit extended by the banking sector to the private sector, and the financial liberalization index proposed by Abiad et al. (2009)[27]. These variables are expected to reduce capital flight since in a more developed financial sector, the Neo-classical presumption is that more investment opportunities would arise and reduce capital flight. Finally, the level of international reserves scaled by GDP is used, which serves as an early warning signal for currency crises hence capital flight.

With these additional control variables at hand, the extended regression equation that accommodates them is specified in equation (5.2):

$$\kappa_t = \alpha + \sum_i^p \beta_i \kappa_{t-i} + \sum_i^q \theta_i Institutions_{t-i} + \sum_i^q \vartheta_i CId_i + \delta' X_t + \psi' Z_t + \varepsilon_t \qquad (5.2)$$

where κ_t, κ_{t-i} and $institutions_{t-i}$ are defined earlier. CId_i is a vector that contains variables that capture the portfolio motive of capital flight such as the interest rate differential, X_t is a vector that contains macroeconomic policy management variables (inflation, government size and debt) and Z_t is a vector that contains financial development variables (M2/GDP, Credit extended to the private sector) and the early warning currency crises signal variable (the level of foreign reserves).

[27](see Brada et al., 2013; Yalta and Yalta, 2012)

5.4.2 Data, Time Series Properties of Data and Stylized Facts

Time series data from 1970 to 2010 is used to test the hypothesis that illicit financial outflows are a result of weaknesses in political institutions. This is because data on illicit capital flows is only available from 1970. Illicit financial flows as ratio of GDP is used as a dependent variable. Data on this variable is obtained from the database of Ndikumana and Boyce (2012b). The calculation of illicit flows is based on a methodology that has widely been used and accepted in the macroeconomic literature since the 1980s in the wake of the Third World Debt crisis (see African Development Bank and Global Financial Integrity (2013); Ndikumana and Boyce (2011); Ndikumane and Boyce (2011); Fofack and Ndikumana (2010); Kar and Cartwright-Smith (2010); Brada et al. (2008); Kar and Cartwright-Smith (2008); Ndikumana and Boyce (2003); Boyce and Ndikumana (2001); Khan and Ajayi (2000); Eaton (1987); Cuddington (1986); Kant (1996),). We now provide the methodology for computation of this data set in Appendix D1 to this Chapter. We also use the data from Letete et al. (2011). The dataset provides data on the dejure index of the quality of institutions measured by "arbitrary executive powers" compiled from laws in Kenya. Details on the computation of this dataset can be found in the appendix to the paper by Letete et al. (2011). For control variables, we use a set of data from the World Development Indicators and IMF International Finance Statistics. Details on sources of data are provided in Table 5.4.

Time series data is often subject to varying means and covariances over time (non-stationarity). All the variables used in this paper are therefore tested for stationarity using the commonly used Augument Dickey Fuller Generalized Least Squares (ADF-GLS) unit root test before the model given in equation (5.1) is estimated. The advantage of this test over other tests is that it has the highest power and exhibits robustness to all but the most extreme breaks in variance. This is in contrast to the original Dickey-Fuller test which has been shown to suffer severe distortion in such circumstances. The ADF-GLS is used with and without a trend. The lag structure is determined by the use of the Bayesian Information Criterion[28]. The need to test for stationarity is grounded in the fact that the use of Time series variables that are non-stationary could result in spurious

[28] see Elliott et al. (1996)

regression. That is a regression in which the OLS estimates are statistically significant, and seem to indicate that a relationship exists between variable of interest when, in reality, there is no such relationship (Granger, 1969).

The results from the unit root test are presented in Table (5.4.2). These results confirm that the dependent variable which is the amount of capital flight expressed as a ratio of GDP is stationary at level hence it is integrated of order zero. It is also noted in the Table that the following are all difference stationary: interest rate differential; the amount of credit extended to the private sector; short-term debt; financial deepening measured by the amount of broad money to GDP; government size measured by total final government expenditure in GDP; real effective exchange rates; capital controls and foreign official development aid are all difference stationary. This implies that these variables are integrated of the first order,$I(1)$. The other control variables, including, inflation, real growth rate of GDP, political instability and trade openness are all stationary at level,$I(0)$. They are integrated of order zero, and need not be differenced when running the regression.

Table 5.1: Unit Root results

Variables	DF-GLS Unit Root Test				ADF Unit Root Test				
	X		ΔX		X		ΔX		
	τ_{μ}	τ_{c+t}	τ_{μ}	τ_{c+t}	τ_{μ}	τ_{c+t}	τ_{μ}	τ_{c+t}	Inference
$Capital\,Flight/GDP_t$	-5.53^{***}	-1.73^{*}	...	...	-4.79^{***}	-5.81^{***}	...	...	$I(0)$
$Arbitrary\,Executive\,powers(index)$	...	...	...	...	...	...	...	...	...
$Interest\ rate\ differential$	-2.42	-3.05^{*}	-6.03^{***}	-4.97^{***}	-2.63	-2.97	-4.92^{***}	-4.87^{***}	$I(1)$
$Inflation\,(Inf)$	-3.09^{***}	-3.52^{**}	...	...	-3.68^{***}	-3.61^{**}	...	...	$I(0)$
$credit\ to\ private\,sector/GDP_t$	-0.35	-2.29	-6.91^{***}	-6.57^{***}	-0.86	-2.35	-6.97^{***}	-6.87^{***}	$I(1)$
$Fhpr_t$	-0.56	-1.63	-2.67^{**}	-2.81^{**}	-0.69	-1.57	-2.97^{**}	-2.81^{**}	$I(1)$
$Financial\,liberalization\,Index_t$	-0.38	-1.41	-4.96^{***}	-5.06^{***}	-0.35	-1.53	-5.02^{***}	-4.95^{***}	$I(1)$
$Trade\ Openness$	-3.24^{***}	-3.25^{**}	-7.17^{***}	-7.64^{***}	-3.13	-3.20^{**}	7.64^{***}	-7.57^{***}	$I(0)$
$shorttermdebt_t$	-1.64	-2.15	-5.64^{***}	-5.94^{***}	-2.72	-3.12	-6.07^{***}	-4.11^{***}	$I(I)$
$M2/GDP$	-0.03	-2.12	-6.81^{***}	-7.04^{***}	-0.06	-2.21	-3.06^{***}	-3.26^{**}	$I(1)$
$(government\,size/GDP)$	-2.16^{*}	-2.37	-3.99^{***}	-5.54^{***}	-2.28	-2.55	-6.32^{***}	-6.18^{***}	$I(1)$
$Real\,Growth\,(RGDPg)$	-4.96^{***}	-5.74^{***}	...	...	-3.30^{***}	-4.37^{***}	...	...	$I(0)$
$Real\,Effective\,Exchange\,Rate$	-0.89	-1.66	-5.34^{***}	-5.59^{***}	-0.21	-0.28	-5.52^{***}	-5.44^{***}	$I(1)$
$Capital\ controls$	-0.94	-2.10	-6.24^{***}	-6.28^{***}	-1.049	-2.18	-6.17^{***}	-6.11^{***}	$I(1)$
(Aid/GDP)	-0.44	-1.85	-8.51^{***}	-8.91^{***}	-1.86	-1.84	-6.63^{**}	-6.59^{***}	$I(1)$
$Political\,Instability$	-5.25^{***}	-5.74^{***}	...	...	-5.69	-5.64^{***}	...	...	$I(0)$

$^{***}p < 1\%$, $^{**}p < 5\%$ and $^{*}p < 10\%$.

5.5 Estimation Results and Discussions

This section presents the results from the estimation of the baseline regression given in equation (5.1). The aim is to explore whether the increasing arbitrary powers of the executive/the politicians is a significant determinant of capital flight and rent extraction from Kenya for the period 1970-2010. As highlighted earlier in the discussions, Kenya suffered huge episodes of capital flight during the period when the executive had arbitrary power. However, this seemingly positive relationship has not been statistically tested.

The combination of the $I(1)$ and $I(0)$ variables that are employed in this paper to assess the foregoing relationship, requires taking the first difference of those variables that are found to be non-stationary at level. In the next stage, an ARDL model specified in equation (5.1) is estimated. This estimation gives the baseline regression results that show the relationship between capital flight and the increasing powers of the executive. These baseline results are shown in Table (5.5) column 1. The results show that increasing powers of the executive is a significant factor in determining capital flight to GDP in a regression without controlling for other determinants of capital flight. This significant positive association between capital and increasing executive powers indicates that executive powers may be used by corrupt officials to transfer resources to themselves and other elites in weakly institutionalized polities. Such resources are often transferred abroad to hide them since they were acquired through illegal means(Blankenburg and Khan, 2012).

However, as highlighted earlier, the estimation of the baseline model is likely to result in biased estimates due to omitted variables (Lan et al., 2010). To circumvent this problem, we introduce a set of control variables one at a time, as noted in the preceding section. Introducing the set of control variables one at a time is also meant to avoid the likely problem of co-linearity among the explanatory variables that is possible given the level of correlations between them (see Table 5.7). The problem of multi-collinearity is the usual increase in the standard errors of the coefficients. These increased standard errors in turn means that coefficients for some independent variables may be found not to be significantly different from zero, yet without multi-collinearity and with

lower standard errors, these same coefficients might have been found to be significant and the researcher may not have come to null findings in the first place.

Based on these considerations, we re-estimate the baseline model with additional control variables. This estimation is performed on the model specified in equation (5.2). we estimate ten specifications of the model to mitigate the problems of co-linearity. The results from these estimations which control for the additional variables that are claimed to determine capital flight from economic theory are shown in column 2 to column 11 of Table (5.5)

In all the estimations presented in column 2 through column 11 of Table (5.5), The LM-test of serial auto-correlation is performed in the residuals from the regression model proposed by Breusch (1978) and Godfrey (1978). The problem of auto-correlation in a regression model is that it causes ordinary least squares to underestimate the standard errors of the coefficients. This means that the t-statistics will usually be bigger than they should be. Consequently, this problem could lead one to mistakenly claim that some coefficients are statistically significant when they are not. In all the estimations here, the null hypothesis of "no auto-correlation" could not be rejected. This suggest that these estimations were not affected by serial auto-correlation, and therefore could be relied upon.

In all the estimations, increasing powers of the executive consistently remain positively associated with capital flight from Kenya. This statistically significant (significant at-least at 5 percent level of significance) association between capital flight and executive powers further indicates that unconstrained powers of the executive remain a robust determinant of capital flight and rent extraction in Kenya. This implies even if one controls for other variables which could determine capital flight. These results suggest that in weakly institutionalized environments, executive powers are used unduly to extract resources from the economy for personal gain. The results cement the argument in the political economy literature raised earlier that under an environment characterized by weak political institutions, the political actors have discretionary political powers that allow them to design or administer regulations and policies in a discretionary manner. The exercise of such powers enables them to steal resources from the state. The central argument being

Table 5.2: Results for the test of the effects of Political Institutions on the Illicit Financial Flows from Kenya

	Dependent Variable: Stock of the Illicit Financial Flows as Ratio of GDP (CF/GDP)										
Variables	1	2	3	4	5	6	7	8	9	10	11
Baseline Variables											
constant	-3.067	-3.1087	-3.1468	-2.7300	-3.016	-4.96	-4.8356	-3.3214	-3.3597	-3.1719	-3.04
$Lag of Capital flight (\kappa_{t-1})$	0.1592	0.1985	0.1993	0.2170	0.206	0.2729	0.2630	0.2343	0.1326	0.1512	0.305
	(0.1585)	(0.1631)	(0.1681)	(0.1690)	(0.1756)	(0.1729)	(0.1766)	(0.1706)	(0.1574)	(0.1688)	(0.189)
$Arbitrary Executive powers (Inst_t)$	0.8642**	0.8444**	0.8437**	0.8346**	0.8861**	0.9636**	0.9941**	0.9115**	0.9124**	0.8570**	1.04**
	(0.4532)	(0.4535)	(0.4607)	(0.4607)	(0.5009)	(0.4843)	(0.4953)	(0.4954)	(0.4309)	(0.4717)	(0.5901)
Control Variables											
$\Delta interest\ rate\ differential$		0.2618	0.2627	0.2622	0.2588	0.2817	0.2911	0.1597	0.1336	0.2612	0.2353
		(0.2579)	(0.2636)	(0.2635)	(0.2674)	(0.2579)	(0.2620)	(0.2614)	(0.2516)	(0.2640)	(0.197)
$Inflation_t$			0.003	0.0036	0.0009*	0.1618	0.1349	-	-	-	
			(0.1140)	(0.1142)	(0.1161)	(0.1412)	(0.1553)	-	-	-	
$Credit\ extended\ to\ the\ private\ sector\ (\Delta Psc_{t-1})$				−0.8093	−0.8161	−0.4785	-0.4177	-	-	-	
				(0.8057)	(0.8172)	(0.8073)	(0.8289)	-	-	-	
$\Delta Freehold\ property\ rights\ (fhpr_t)$					0.0947	0.2932	0.2820	-	-	-	
					(0.3331)	(0.3376)	(0.3428)	-	-	-	
$\Delta Financial\ liberalization\ Index_t\ (FIIndex_t)$						-0.753204*	-0.7204*	-	-	-	-0.4478
						(0.3989)	(0.4198)	-	-	-	(0.3200)
$\Delta Openness_t$							0.0704	0.0713	-	-	0.1309
							(0.1585)	(0.1479)	-	-	(0.126)
$\Delta shorttermdebt_t$											0.755*
											(0.385)
$\Delta(M2/GDP)$								-0.7110	-	-	-0.1079
								(0.4999	-	-	(0.3562)
$\Delta government\ size$									2.2587*	-	1.865
									(1.0031)	-	(0.8976)
$GDP\ growth\ (GDPg)$										-0.036	-0.149
										(0.153)	(0.211)
Real effective exchange rate (Reer)											-0.004
											(0.031)
Diagnostic Checks											
$Adjusted\ R^2$	0.15	0.17	0.18	0.19	0.20	0.28	0.29	0.28	0.27	0.15	0.4561
Observations	40	40	40	40	40	40	40	40	40	40	39
LM-test-Statistic	1.1394	0.6732	0.6806	0.7607	0.7239	1.8513	1.3675	0.7212	1.599	1.3578	2.275
P-value-(χ^2)	[0.5667]	[0.7142]	[0.7116]	[0.6836]	[0.6963]	[0.3963]	[0.5047]	[0.6972]	[0.449]	[0.5072]	[0.1314]

Notes: $***p < 1\%$, $**p < 5\%$ and $*p < 10\%$., Period of estimation:1970-2010, LM-test tests the null hypothesis of no serial autocorelation in the residuals

Numbers in parenthesis are the robust standard error

that the exploitation of the discretionary power is enabled by weak political, administrative and legal institutions (Aidt, 2003; Andvig et al., 2001; Bardhan, 1997).

Although the results of the three specifications reflected in column 2 through 5 indicate that the interest rate differential is also important in determining capital flight, it loses significance when more controls are added to the regression. This further suggests that risk return measures and portfolio diversification motives are not the main drivers of capital flight and rent extraction in Kenya. The history of corruption reflected in the earlier sections of this paper further strengthen the evidence that it is neither macroeconomic factors nor portfolio motives that explain capital flight from Kenya. The cause is is mostly corruption by leaders who extract the country's resources in a seemingly unconstrained manner. Such unconstrained leaders dismantle checks and balances intentionally to enable themselves to extract the resources of the economy. The historical context provided earlier shows clearly that indeed Kenyatta and Moi dismantled checks and balances. This resulted in grand corruption in Kenya which has the adverse consequence of capital flight from the economy.

Indeed, the results show debt fueled capital flight as indicated in column 11 of Table (5.5), and that a one percentage change in short-term debt to GDP increases capital flight by about 0.7%. This result strengthens the arguments raised by Ndikumana and Boyce (2011, 2003); Ndikumane and Boyce (2011) that contends that capital flight from Africa is explained by debt accumulation: A situation that they refer to as the revolving door hypothesis.

Interestingly, the results show that capital flight from Kenya is also related to the size of government. Column 8 through 10 in Table (5.5) show that the size of government measured by the amount of final government consumption of goods and services is positively related to capital flight. This result is intuitive given the history of Kenya in which public servants supplied the government with goods and services often at inflated prices. The result strengthens the argument that state resources were often used for personal gain during both the Kenyatta and the Moi's regimes (Hornsby, 2013). One of the channels through which capital flight was financed was through government purchase of goods and services.

Hornsby (2013) supports this result in his claim that as the number of scandals in Kenya began to be revealed, it became apparent that contracts between the government and several companies in which government officials and ministers were shareholders were designed to steal taxpayers money. It was noted earlier that foreign donors were infuriated to discover that while the Kenyan government was stealing sums of similar size to the entire aid budget.

5.5.1 Robustness Checks Using Alternative Indicators of Political Institutions

To check the robustness of the results, we use an alternative dataset on the constraints on the executives from the Polity IV indicators. The results from the usage of this variable show that indeed constraining the powers of the executive is negatively related to capital flight. This implies that strengthen institutions of accountability will result in reduction in capital flight. The variable remains consistently significant across all model specifications. The results are shown in Table (5.3). From column 1 through column 11, constraints on the powers of the executive remain a robust determinant of capital flight from Kenya.

Table 5.3: The Effect of Political Institutions on the Illicit Financial Flows in Kenya: The Robustness Checks Using Alternative Institutional Measures

	Dependent Variable: Stock of Capital Flight as Ratio of GDP (CF/GDP)										
Variables	1	2	3	4	5	6	7	8	9	10	11
Baseline Regression											
constant	7.109	6.798	7.030	7.145	6.737	8.207	8.440	8.773	9.504	8.470	8.289
CF_{t-1}	0.173	0.211	0.207	0.225	0.205	0.243	0.248	0.179	0.224	0.333	0.307
	(1.158)	(0.163)	(0.172)	(0.170)	(0.162)	(0.169)	(0.176)	(0.177)	(0.193)	(0.064)	(1.59)
$Constraints\,on\,the\,Executive\,powers\,(ConEx)$	-1.537**	-1.490**	-1.501**	-1.449**	-1.457**	-1.709**	-1.779**	-1.868**	-1.867**	-1.719***	-1.356**
	(0.659)	(0.675)	(0.698)	(0.678)	(0.696)	(0.696)	(0.716)	(0.674)	(0.668)	(0.623)	(0.723)
Control Variables											
$\Delta interest\ rate\ differential\,(Intdiff_t)$		0.246	0.242	0.243	0.245	0.230	0.260	0.145	0.161	0.208	0.1956
		(0.180)	(0.189)	(0.191)	(0.182)	(0.179)	(0.176)	(0.164)	(0.172)	(0.175)	(0.179)
$Inflation_t$				−0.0190		0.0009*	0.1618	0.1349	-	-	
				(0.0862)	-	-	-	-	-	-	
$Credit\,extended\,to\,the\,private\,sector\,(\Delta Psc_{t-1})$				-0.711	-	-	-	-	-	-	
				(0.679)	-	-	-	-	-	-	
$\Delta(M2/GDP_t)$					-0.0904	−0.00672	−0.00390	-0.0167	-0.0328	-0.0731	-0.0874
					(0.441)	(0.384)	(0.338)	(0.350)	(0.358)	(0.3675)	(0.3641)
$\Delta Financial\,liberalization\,Index_t\,(AETindex_t)$						-0.589*	-0.609*	-0.508*	-0.570*	-0.527*	-0.489
						(0.290)	(0.269)	(0.280)	(0.293)	(0.303)	(0317)
$\Delta Openness_t$							0.135	0.151	0.149	0.125	0.126
							(0.131)	(0.124)	(0.124)	(0.130)	(0.121)
$\Delta government\ size\ (gsize)$								2.117**	2.267**	1.920**	2.01**
								(0.927)	(0.945)	(0.834)	(0.860)
$GDP\,growth\,(GDPg)$									-0.172	-0.086	-0.138
									(0.170)	(0.208)	(0.204)
$shorttermdebt_t$										0.7563**	0.7449**
										(0.3731)	(0.379)
Real effective exchange rate (Reer)											-0.016
											(0.0289)
Diagnostic Checks											
$Adjusted\ R^2$	0.168	0.1897	0.189	0.1889	0.2073	0.1899	0.2703	0.2915	0.381	0.457	0.463
Prob (F-statistics)	0.0061	0.0082	0.0082	0.021	0.0092	0.0165	0.0050	0.0039	0.0006	0.0002	0.000
Observations	40	40	40	40	40	40	40	40	40	40	39
LM-test-Statistic	1.592	0.478	0.538	0.801	0.220	0.364	1.945	2.712	3.146	1.699	2.676
P-value-(χ^2)	[0.2070]	[0.4894]	[0.4632]	[0.3709]	[0.6389]	[0.5462]	[0.1631]	[0.0996]	[0.0761]	[0.449]	[0.1019]

Notes: $^{***}p < 1\%$, $^{**}p < 5\%$ and $^{*}p < 10\%$., Period of estimation:1970-2010, LM-test tests the null hypothesis of no serial autocorelation in the residuals

Numbers in parenthesis are the robust standard errors

5.6 Conclusion

This Chapter has shown that increased arbitrary executive powers is the main factor driving illicit financial flows from Kenya. Thus institutional quality, in particular effective constraints on executive powers, has an independent impact on illicit financial flows. These results are fairly robust to alternative measures of institutional quality and additional control variables. This study has also demonstrated that macroeconomic variables and portfolio motives are by no means the only causes of illicit outflows from the country. The empirical results provided also show strong evidence of the revolving door relationship between external debt and capital flight. This means that part of Kenya's debt was used to finance illicit financial outflows by the ruling elites. Debt fueled illicit capital outflows, and government spending fueled illicit capital outflows. This empirical evidence lends strong support to the theoretical model that shows how illicit financial flows arise from the incentives of politicians for rent extraction under an environment characterized by weak institutions. This study also demonstrates that under weakly institutionalized environments, leaders use selective incentives such as patronage provision of public goods, to intensify the collective action problem across different ethnic groups in a society in order to remain in power and continue rent extraction. Because of the fear of exclusion, ordinary citizens support the corrupt leaders even when they are aware of their self-enrichment motive.

The evidence provided in this chapter has immediate policy implications: Achieving and maintaining strong institutions is likely to reduce rent extraction and illicit capital outflows. These implications may be relevant to the other countries that are faced with a similar problem. However this does not mean that favourable macroeconomic conditions do not matter for other types of illicit financial outflows. Illicit financial capital outflow is a complex phenomenon involving government, the private sector and the international community. There is a need to have a holistic approach to the question of capital flight from African countries. Emphasis on achievement of macroeconomic stability and favourable returns adjusted for risk might not be the only strategy to curb capital flight since it arises also from the politicians' incentives for rent extraction. The control of politicians can also contribute to reducing capital flight from these countries.

APPENDIX TO CHAPTER 5

APPENDIX D1

Table 5.5: Some examples of Corruption Scandals involving Capital Flight from Kenya

No.	Name of the Scandal	Amount Involved
1.	Goldenberg Scandal	10% of the country's annual GDP.
2.	Helicopter Servicing Contract	Sh360 million
3.	Navy Ship Deal	4.1 billion (ks)
4.	Contracting Hallmark International Scandal	$3 million
5.	The construction of Nexus	US$36.9 million)
6.	The Passport Equipment System Deal	£20 million
7.	Education Scandal	$1 million
8.	Grand Regency Scandal	GBP5billion
9.	Moi Scandal	GBP 1 billion
10.	2009 Triton Oil Scandal	US$98.7 million

Source: Report on Corruption in Kenya, 2005 by Wikileaks

Table 5.4: Variables Names, Definition and Sources

Classification of variables	Variables	Definition	Source
Dependent variable	CF_t	Capital flight expressed as ratio of GDP in constant 2005 prices[a] (%).	Ndikumana and Boyce (2012b,a)
Control Variables:			
(1) Risk and Return Factors:	$Reex_t$	Change in real effective exchange rate	World Development Indicators, 2010
	$Intdiff_t$	Interest rate differential between the domestic deposit rate and US treasury bill rate (%)	World Development Indicators, 2010
	$GDPg$	Annual GDP growth (%)	World Development Indicators, 2010
(2) Institutional Indicators:	$Inst_t$	Increasing powers of the arbitrary executive powers	World Development Indicators, 2010
	$fhpr_t$	Freehold property rights index	Computed in this Study (see Chapter 2)
	$Prcl_t$	Political rights and civil liberties index	Computed in this Study (see Chapter 2)
	$ConEx_t$	Constraints on the executive from polity IV indicators	Polity IV Database
(3) Macroeconomic Policy Indicators	$Inflation_t$	Inflation in the domestic economy measured as change in CPI (%)	World Development Indicators, 2010
	$gsize$	The value of final government consumption expressed as a ratio of GDP (%)	World Development Indicators, 2010
	$shorttermdebt_t$	Short term debt expressed as a ratio of GDP (%)	World Development Indicators, 2010
(4) Liberalization Indices			
	$Openness_t$	Exports plus imports expressed as ratio of GDP to measure current account openness (%)	World Development Indicators, 2010
	$CIindex_t$	Chin Ito index measures the degree of exchange controls in an economy	World Development Indicators, 2010
	$AETindex_t$	Abdul, Enrica and Tressel index of financial liberalization	Abdul A., Enrica D., and Treseel T., (2008)
(5) Financial Development Indices			
	Psc_{t-1}	Domestic credit extended to the private sector by the banking sector expressed as a ratio of GDP (%)	World Development Indicators, 2010
	$M2/GDP_t$	Financial deepening index measured as a ratio of broad money (M2) to GDP (%)	World Development Indicators, 2010

[a] This study uses the illicit financial flows from Ndikumana and Boyce, 2010 as an indicator of illicit capital flows from Kenya. The data is computed following the residual based approach . For detailed explanations, reference can be made to the Authors.

Table 5.6: Descriptive Statistics

	CF05	ConEx	Reer	M2/GDP	Psc	Inflation	gsize	Gdpg	AETindex	Inst	Debts	Openness	Intdiff	Fhpr
Mean	2.199	3.667	51.747	33.778	20.137	13.036	17.235	4.545	0.495	5.436	12.120	59.630	0.225	50.641
Median	2.019	3.000	31.089	34.355	19.409	11.398	17.460	4.066	0.405	6.000	11.941	57.364	0.337	54.000
Maximum	14.074	7.000	119.281	44.138	27.951	45.979	19.803	22.174	0.738	7.000	18.908	74.574	12.978	59.000
Minimum	-7.929	3.000	7.1641	25.710	13.395	1.554	14.479	-0.799	0.274	1.000	7.7000	47.703	-11.642	40.000
Std. Dev.	5.999	1.344	42.405	5.114	3.696	8.464	1.359	4.325	0.193	2.075	2.7820	7.099	3.774	7.724
Skewness	0.055	1.549	0.302	0.297	0.407	1.734	-0.273	2.308	0.217	-1.189	0.667	0.339	-0.0586	-0.352
Kurtosis	1.882	3.564	1.345	1.897	2.074	7.285	2.215	9.622	1.207	2.858	3.197	2.232	7.3361	1.376
Jarque-Bera	2.052	16.108	5.044	2.549	2.468	49.373	1.487	105.895	5.527	9.212	2.952	1.709	30.575	5.094
Probability	0.359	0.00032	0.0803	0.2780	0.291	0.00	0.476	0.000	0.063	0.0099	0.229	0.425	0.000	0.078
Sum	85.757	143.00	2018.15	1317.33	785.36	508.40	672.17	177.26	19.29	212.0000	472.697	2325.561	8.765	1975.00
Sum Sq. Dev.	1367.44	68.667	68334.08	993.73	519.01	2722.38	70.223	710.94	1.416	163.5897	294.12	1915.032	541.38	2266.97
Observations	39	39	39	39	39	39	39	39	39	39	39	39	39	39

Table 5.7: Correlation Matrix

Correlation Probability	CF05	ConEx	Reer	M2/GDP	Psc	Inflation	gsize	Gdpg	AETindex	Inst	Debts	Openness	Intdiff	Fhpr
CF05	1.000000													
	—													
ConEx	-0.198949	1.000000												
	0.2247	—												
Reer	-0.399798**	0.701495***	1.000000											
	0.0117	0.0000	—											
M2/GDP	-0.322470**	0.671129***	0.798987***	1.000000										
	0.0453	0.0000	0.0000	—										
Psc	-0.410526***	0.647088***	0.860791***	0.688057***	1.000000									
	0.0094	0.0000	0.0000	0.0000	—									
Inflation	-0.039474	-0.054704	-0.085106	-0.125506	-0.156680	1.000000								
	0.8114	0.7408	0.6065	0.4465	0.3408	—								
gsize	0.289676*	-0.040884	-0.438501***	-0.464777**	-0.280567*	0.068826	1.000000							
	0.0737	0.8048	0.0052	0.0029	0.0836	0.6772	—							
Gdpg	0.134211	0.008206	-0.293617*	-0.095749	-0.284008*	-0.321457	0.451215**	1.000000						
	0.4153	0.9605	0.0696	0.5620	0.0797	0.0460	0.0039	—						
AETindex	-0.372822**	0.692034***	0.970152***	0.822266***	0.854392***	-0.089203	-0.429691**	-0.284347*	1.000000					
	0.0194	0.0000	0.0000	0.0000	0.0000	0.5892	0.0063	0.0794	—					
Inst	0.360946**	-0.741031***	-0.908627***	-0.84028***	-0.71281***	-0.033231	0.465019**	0.245332	-0.91811***	1.000000				
	0.0240	0.0000	0.0000	0.0000	0.0000	0.8408	0.0029	0.1322	0.0000	—				
Debts	0.199595	-0.163248	-0.475380***	-0.220850	-0.356073**	-0.032996	0.129757	0.164372	-0.339033**	0.358915**	1.000000			
	0.2231	0.3207	0.0022	0.1767	0.0261	0.8419	0.4311	0.3173	0.0347	0.0248	—			
Openness	0.030972	0.192327	-0.106586	0.162955	-0.002834	0.368826**	-0.033603	0.158907	-0.065083	-0.055456	0.089069	1.000000		
	0.8515	0.2408	0.5184	0.3216	0.9863	0.0209	0.8391	0.3339	0.6939	0.7374	0.5897	—		
Intdiff	0.007085	0.045922	0.036677	-0.005668	0.057287	-0.026518	-0.015789	-0.125304	0.044601	-0.079070	-0.132591	0.122874	1.000000	
	0.9659	0.7813	0.8246	0.9727	0.7290	0.8727	0.9240	0.4472	0.7875	0.6323	0.4210	0.4561	—	
Fhpr	0.059651	0.370701**	-0.273487*	-0.089269	-0.089892	-0.043231	0.408619***	0.449045**	-0.249680	0.214756	0.423584**	0.396149**	-0.006443	1.000000
	0.7183	0.0202	0.0921	0.5889	0.5863	0.7938	0.0098	0.0041	0.1253	0.1892	0.0072	0.0125	0.9689	—

APPENDIX D2

DESCRIPTION OF METHODOLOGY FOR COMPUTING ILLICIT FINANCIAL FLOWS

This study uses the illicit financial flows for Kenya from Ndikumana and Boyce, 2010. The data is computed following the residual based approach presented in this appendix for ease of reference. The residual method has generally been accepted in Macroeconomic Literature as authentic method for computing illicit financial flows. Illicit financial flows are defined to be the difference between total capital inflows and recorded foreign exchange outflows. Thus, in a given year t for country i, the illicit financial flows are computed as:

$$KF_{it} = \triangle DEBTADJ_{it} + DFI_{it} - (CA_{it} + \triangle RES_{it}) \tag{5.3}$$

where $\triangle DEBTADJ_{it}$ is the change in total external debt outstanding adjusted for exchange rate fluctuations, DFI is the net direct foreign investment, CA is the current account deficit, and $\triangle RES_{it}$ is the net additions to the stock of reserves.

Equation 5.3 is then corrected for exchange rate fluctuations, in particular corrections for changes in long term debt due to fluctuations in exchange rates of dollar against other currencies, equation 5.4 is obtained:

$$NEWDEBT_{i,t-1} = \sum_{j=1}^{7} (\alpha_{ij,t-1} * LTDEBT_{i,t-1})/(EX_{jt}/EX_{j,t-1}) + IMFCR_{i,t-1}/(EX_{SDR,t}/EX_{SDR,t-1})$$

$$+ LTOTHER_{i,t-1} + LTMULT_{i,t-1} + LTUSD_{i,t-1} + STDEBT_{i,t-1} \tag{5.4}$$

where LTDEBT is the total long-term debt; α_{ij} is the proportion of long-term debt held in currency j, for each of the seven non-US currencies; EX is the end-of-year exchange rate of the currency of denomination against the dollar (expressed as units of currency per US dollar); IMF_{CR} is the IMF credit; $LTOTHER$ is the long-term debt denominated in other unspecified currencies; $LTMULT$ is the long-term debt denominated in multiple currencies; $LTUSD$ is the long-term debt denominated in US dollars; $STDEBT$ is the short-term debt, and $DEBT$ is the total debt stock reported by the World Bank.

To adjust for exchange rate, the following equation is estimated:

$$ERADJ_t = NEWDEBT_{t-1} - DEBT_{t-1} \tag{5.5}$$

The adjusted change in debt is obtained as follows:

$$DEBTADJ_t = DEBT_t - ERADJ_t \tag{5.6}$$

since the $\triangle DEBT_t = DEBTt - DEBTt - 1$, it follows that 5.6 is equivalent to:

$$\triangle DEBTADJ_t = DEBT_t - NEWDEBT_{t-1} \tag{5.7}$$

Five further adjustments are made in the calculation of capital flight:these are, adjustments for debt written off, adjustments for trade misinvoicing, adjustments for under-reporting of remittances, inflation adjustments and finally adjustment for interest rates earnings.

The Trade Misinvoicing Adjustment is given as:

$$DXIC_{it} = PXIC_{it} - (XIC_{it} * CIF_t) \tag{5.8}$$

where $PXIC$ is the value of the industrialized countries exports from the African country as reported by the industrialized trading partners, XIC is the African countries exports to industrialized countries as reported by the African country, and CIF is the c.i.f/f.o.b factor, representing the costs of freight and insurance. A positive sign on $DXIC$ indicates exports underinvoicing.

The imports discrepancies with the industrialized countries are computed as follows:

$$DMIC_{it} = MIC_{it} - (PMIC_{it} * CIF_t) \tag{5.9}$$

where MIC is the African Countries imports from the industrialized countries as reported by the African country, and PMIC is the industrialized countries exports to the Africa country as reported by the industrialized trading partners, A positive sign on DMIC indicates net overinvoicing of imports; a negative sign indicates the net underinvoicing.

To obtain the global totals, the two discrepancies are multiplied by the inverse of the average shares of industrialized countries in the African countries exports (ICXS) and imports (ICMS). Thu, gives the total trade misinvoicing as the sum of the exports discrepancies and imports discrepancies as shown in equation 5.10:

$$MISINV_{it} = \frac{DXIC_{it}}{ICXS_i} + \frac{DMIC_{it}}{ICMS_i} \tag{5.10}$$

Adding the misinvoicing to the initial value of capital flight, equation 5.11 is obtained:

$$ADJKF_{it} = KF_{it} + MISINV_{it} \tag{5.11}$$

From equation 5.11, an adjustment is made for the under-reporting of remittances to give:

$$CADJKF_{it} = ADJKF_{it} + RID_{it} \tag{5.12}$$

where

$$RID_{it} = (ARI_{i,2006} - BPRI_{i,2006}) * BPRI_t / BPRI_{2006} \tag{5.13}$$

RID_{it} is the remittance inflow discrepancy in country i in year t; $ARI_{i,2006}$ and $BPRI_{i,2006}$ are the alternative and BoP measures, respectively of remittance inflows in country i in the year 2006; and $BPRI_t$, and $BPRI_{i,2006}$ are the BoP measures of remittances inflows to African countries as a whole in year t and 2006, respectively.

The final step, is to adjust for inflation and interest earnings respectively:

$$RADJKF_{it} = CADJKF_{it} / PPI_t \tag{5.14}$$

where PPI_t is the US producer price index (with constant base), and adjusting for interest earnings using US Treasury bill rate on short term bonds ($TBILL$) equation 5.15 is obtained:

$$SADJKF_{it} = SADJKF_{i,t-1}(1 + TBILL_{it}) + CADJKF_{it} \tag{5.15}$$

This method further assumes that the residual of the total capital inflows and recorded foreign exchange outflows represents the net foreign claims by the private sector, such that if $CF_t > 0$, capital flight exist, and if $CF_t < 0$, capital repatriation exists. The residual method takes into account the external debt, change in reserves, current account deficit, foreign direct investment, and portfolio investment. The basic form of this method is specified as follows:

$$CF_t = dD_t + NFI_t - (CAD_t + dR_t) \tag{5.16}$$

where CF_t = capital flight , dD_t = change in external debt, NFI_t= net foreign direct investment, CAD_t = current account deficit, dR_t = change in official reserves. In effect, this approach assumes that the recorded increase in external debt gives a better measure of net new foreign loans.

However, it must be noted that this method is by no means the only method of measuring capital flight, but it was chosen because of its close association with the questions raised in this paper and the fact that it allows one to draw implications for capital scarcity and concomitant adverse consequences on the economy, since under this method capital flight represents lost resources that could have been utilized in the domestic economy to promote economic activities. The variants of this method are discussed in Chang and Cumby (1991) and Gajdeczka and Oks (1989).

Estimates from equation (5.16) are called baseline estimates of capital flight. Beja Jr et al. (2005) argue that data used to estimate Equation (5.16) might contain errors, in particular errors in capital account and in the current account. Therefore some adjustments are needed to correct these errors . In the capital account, they argue that one adjustment concerns the currency valuation effect on external debt. Thus, since long term debt are acquired from different countries, expressed in their own denominations, currency fluctuations will affect their respective values across periods. Accordingly, one has to adjust the external debt taking into account foreign currency changes at time $t-1$ (FXD_t) to obtain adjusted external debt (dD_tAdJ) at time t. Thus,

$$dD_tADJ = D_t - FXD_{t-1} \tag{5.17}$$

Therefore the appreciation of hard currency relative to the US dollar increases estimates for Equation (5.17). Since debt (D_t) is what is normally reported, dD_tADJ captures unreported debt inflows. Accordingly, Equation (5.16) is re-estimated as:

$$CF_t = dD_tADJ + NFI_t - (CAD_t + dR_t) \tag{5.18}$$

Estimates from Equation (5.18) are called baseline estimates with adjusted debt. The other adjustment concerns current account. Specifically, export and import data could be inaccurate due to trade misinvoicing either through import over-invoicing or exports under-invoicing. As such, capital flight also takes place through these means. Import under-invoicing represents technical

smuggling undertaken to evade customs duties and trade restrictions, which can be reported as a form of reverse capital flight. Exports over-invoicing may be a response to government incentives that reward industries based on performance indicators like exports revenues. Following Beja Jr et al. (2005) we follow the three steps procedure to compute the trade misinvoicing. The first is to compute the exports and imports discrepancies for Kenya in its trade with its major trading partners, such that we have:

$$DX_t = PX_t - CIF.X_t \tag{5.19}$$

$$DM_t = M_t - CIF.PM_t \tag{5.20}$$

where DX_t and DM_t are the total exports and imports discrepancies, respectively; PX_t is the value of trading partners'imports from Kenya as reported by the trade partners, and PM_t is the value of the trade partner's exports to Kenya as reported by trade partner; X_t and M_t are Kenya's exports to and imports from major trading partners, respectively, as reported by the country. CIF is the $c.i.f/f.o.b.$ factor to adjust exports data forecast of freight and insurance. The next step is to calculate global exports and imports discrepancies for trade misinvoicing by multiplying these discrepancies with an inverse of the shares of major trading partners in Kenya's exports and imports. The last step is to find the sum of exports and imports discrepancies from the second step to get total trade misinvoicing; that is,

$$MIS_t = DX_t + DM_t \tag{5.21}$$

We then add the figure obtained from Equation (5.21) to Equation (5.18) to obtain the total adjusted capital flight $(AdjCF_t)$:

$$AdjCF_t = CF_t + MIS_t \tag{5.22}$$

Finally we attempt to get real capital flight by deflating Equation (5.22) using an appropriate deflator (USA producer price index) with a base year of 2010 in order to get estimates comparable across periods,

$$RCF_t = \frac{AdjCF_t}{PPI_t} \tag{5.23}$$

Noting that capital flight is like capital invested abroad and that such capital could earn some return, we then compute the stock of capital flight capital flight, which is an accumulated stock of capital flight and interest earnings on capital flight;

$$SCF_t = SCF_{t-1}(1 + r_t) + AdjCF_t \tag{5.24}$$

where r_t is the interest rate on 90 day treasury bill of United States. Equation (5.24) is an estimate of total opportunity cost of the illicit financial flows at time t.

Chapter 6

Conclusion

6.1 Summary of Findings

This thesis focuses mainly on three related issues dealt with in new institutional economics and political economy research: (i) the evolution of formal economic and political institutions over time (ii) the causality between political institutions and economic institutions, and that between institutions and economic development; (iii) and the role of institutions in economic development through the channel of foreign direct investment and on the control of rent seeking and corruption in Kenya. These issues are discussed in distinct essays, each essay constituting an independent and self-contained chapter. It adopts the conceptual framework on institutions proposed by Douglass North.

The first essay presents the new set of *de-jure* political and economic institutions for Kenya and explores their evolution over a 130-year period (1880-2010). It addresses three related questions: what kind of economic institutions and political institutions did the colonial settlers set up in Kenya? Did they set up inclusive institutions or extractive institutions, in the terminology of Acemoglu and Robinson (2012)? How did these institutions evolve over time? Did these institutions change after independence? This essay discusses the evolution of these institutions and shows

the dynamic interactions between political and economic institutions, and how the equilibrium economic institutions are shaped by political forces over time. The essay shows first that existing economic institutions (property rights institutions) in Kenya were largely shaped by the legal framework introduced since 1885 when Kenya was declared a British protectorate. The period of British rule included the protectorate period (1885-1920) and colonial period (1920-1963). During this period an extensive legal apparatus was designed to expropriate much of the land and redistribute it to the white settlers at the expense of the indigenous population . These laws promoted the freehold property rights system for the benefit of the settlers while undermining pre-existing non-freehold systems which were based on indigenous customary laws. Thus, Africans were often displaced to make way for Europeans and had to settle in marginal areas known as "native reserves". However, even their rights to land usage in those native reserves were squarely limited by the discretionary powers of the Governor. This policy of land grabbing was at the origin of many grievances and conflicts over resources between the Natives and the settlers which the government attempted to quench with little success. The Natives' mobilization and agitation over the injustices of land expropriations culminated in the Mau-Mau revolt in the early 1950s. In response to the revolt, the British colonial office enacted laws that promoted free tenure holdings (individualization of tenure) in the native reserves. It also created settlement schemes to diffuse tension and ensure that the colonial land-holding structure could be preserved more or less intact. After 1963, the newly independent Kenya made little effort to fundamentally change the colonial laws that governed land rights. The situation deteriorated further as the executive—under Kenyatta and then under Moi—exercised unchecked powers over land matters and control over any resources in the economy. It was not until the advent of democracy in 1992 that some of the most restrictive laws were repealed. During the third regime of the post independence period under the political administration of president Kibaki, some notable improvements were made in the legal framework to protect property rights. Despite improvements in legislation, the problem of land allocation has not been addressed and remains one of the sources of conflict over resources in this economy. This first essay contributes to the institution-development literature by filling in the research gap identified by North (1993, page 1) when he stated that: "although Ronald Coase made

the fundamental contribution of pointing out that when it is costly to transact, institutions matter, neither he nor most of his followers have explored how property rights and other institutions come about". This essay further contributes to the literature on the measurement of institutions in general by providing a novel dataset on institutions in Kenya. By design, this new dataset circumvents the major problems identified in conventional institutional indices. This essay also contributes to the political economy literature which addresses questions centered on the creation and evolution of institutions.

The second essay provides the first application of the newly constructed dataset on institutions from the previous chapter. It presents empirical evidence to answer the three basic questions of the institutions-development literature: (a) Are institutions persistent and why? (b) Do political institutions cause economic institutions? (c) What is the direction of causality between institutions and economic development in Kenya? This essay provides conclusive evidence in support of the theoretical assumption that is often made in empirical work that institutions are persistent. Second, the essay provides further evidence on the theoretical claim by Acemoglu and Robinson (2012) that political institutions drive economic institutions. The essay shows that in the context of Kenya political institutions Granger caused economic institutions during the post-independence period. The research however notes the possibility of reverse causality from economic institutions to political institutions and provides the caution that development scholars and institutional reformist must be aware of this. This essay further provides some evidence on the causality between institutions and economic development in Kenya. It shows that economic institutions Granger caused economic growth in Kenya during the post-independence period. This result supports the cross sectional and panel evidence that institutions are the drivers of growth and development. The essay makes three distinct contributions to the institutions-development literature. First, it provides evidence for the assumption that institutions are persistent and offers explanations for this persistence. Second, it provides a conclusive test for the hypothesis advanced by Acemoglu and Robinson (2012) that political institutions drive economic institutions. Third, it contributes to the institutions-development literature by presenting evidence on the causality between institutions and economic development for a country case study using Time series methods,

as suggested by Chang (2011) and Chang (2006).

The third essay assesses the role of property rights institutions on foreign direct investment in Kenya. The results from this essay provide evidence that indeed property rights institutions are central in attracting FDI to Kenya. This evidence supports the emerging theoretical claim by the New Institutional Economics (NIE) literature that developing countries are unable to attract and retain foreign capital because of weaknesses in property rights institutions. This evidence notwithstanding, there are other factors that remain important in attracting FDI. These factors include: overall macroeconomic management and political stability. This essay contributes to the economic literature in three ways. First, it provides evidence in support of the claim that property rights institutions are central in attracting FDI. This analysis meets Chang (2011) and Rodrik (2008)'s suggestion that institutions and economic development studies must also apply Time Series case studies to understand the role of institutions in economic development outcomes. Second, it contributes to this literature by constructing a theoretical model that presents the channel that links the quality of property rights institutions and foreign direct investment decisions to invest in a developing country. Third, it contributes to the growing development literature that looks at the channels through which institutions influence the process of economic development in developing countries. As pointed out by Alfaro et al. (2007) there is little systematic evidence on the specific mechanisms of how institutions affect economic development. This work identifies FDI as one of those missing links.

The last essay explores the relationship between political institutions and illicit financial flows from Kenya. This exercise is motivated by the puzzle of continued net outflows of financial resources experienced by a number of African countries despite their lack of resources to finance their developmental goals. This essay addresses one question: What is the relationship between political institutions and illicit financial flows and rent extraction from Kenya? The essay assesses empirically the role of political institutions with respect to illicit financial flows. This empirical assessment reveals that increased executive power in Kenya is positively associated with illicit financial flows. Thus weaknesses in political institutions matter for illicit financial flows from

Kenya. The implications from this evidence are clear in that reducing the powers of the executive could reduce illicit capital flows, especially those associated with corruption in government.

Bibliography

Abiad, A., Detragiache, E., and Tressel, T. (2009). A new database of financial reforms. *IMF Staff Papers*, 57(2):281–302.

Acemoglu, D. (1995). Reward structures and the allocation of talent. *European Economic Review*, 39(1):17–33.

Acemoglu, D. and Akcigit, U. (2012). Intellectual property rights policy, competition and innovation. *Journal of the European Economic Association*, 10(1):1–42.

Acemoglu, D. and Johnson, S. (2003). Unbundling institutions. *National Bureau of Economic Research Working Paper No. 9934*.

Acemoglu, D., Johnson, S., and Robinson, A. (2001). The colonial origins of comparative development: an empirical investigation. *The American Economic Review*, 91(5):1369–1401.

Acemoglu, D., Johnson, S., Robinson, J., and Thaicharoen, Y. (2003). Institutional causes, macroeconomic symptoms: volatility, crises and growth. *Journal of Monetary Economics*, 50(1):49–123.

Acemoglu, D., Johnson, S., Robinson, J., and Yared, P. (2008). Income and democracy. *American Economic Review*, 98(3):808–842.

Acemoglu, D., Johnson, S., and Robinson, J. A. (2002). Reversal of fortune: Geography and institutions in the making of the modern world income distribution. *The Quarterly Journal of Economics*, 117(4):1231–1294.

Acemoglu, D., Johnson, S., Robinson, J. A., and Yared, P. (2009). Reevaluating the modernization hypothesis. *Journal of Monetary Economics*, 56(8):1043–1058.

Acemoglu, D. and Robinson, J. (2012). *Why nations fail: the origins of power, prosperity, and poverty*. Random House Digital, Inc.

Acemoglu, D. and Robinson, J. A. (2006). De facto political power and institutional persistence. *The American Economic Review*, 96(2):325–330.

Acemoglu, D. and Robinson, J. A. (2008). Distinguished guest lecture: The persistence and change of institutions in the americas. *Southern Economic Journal*, 75(2):282–299.

Acemoglu, D., Robinson, J. A., and Torvik, R. (2011). Why do voters dismantle checks and balances? Technical report, National Bureau of Economic Research.

Acemoglu, D., Verdier, T., and Robinson, J. A. (2004). Kleptocracy and divide- and- rule: A model of personal rule. *Journal of the European Economic Association*, 2(2-3):162–192.

African Development Bank, A. and Global Financial Integrity, G. (2013). *Illicit Financial Flows and the Problem of Net Resource Transfers from Africa: 1980-2009*. OECD Publishing.

African Development Bank Group (AfDB), OECD Development Center, U. and UNECA (2012). *"Human Development", in African Economic Outlook 2012: Promoting Youth Employment,*. OECD Publishing. http://dx.doi.org/10.1787/aeo-2012-6-en.

Ahlquist, J. (2006). Economic policy, institutions, and capital flows: portfolio and direct investment flows in developing countries. *International Studies Quarterly*, 50(3):681–704.

Aidt, T. S. (2003). Economic analysis of corruption: a survey*. *The Economic Journal*, 113(491):F632–F652.

Aisen, A. and Veiga, F. (2010). How does political instability affect economic growth? *Documentos de Trabajo (Banco Central de Chile)*, Vol. 20(568):1.

Ajayi, S. I. (1995). Capital flight and external debt in nigeria. *AERC Research Paper 35*.

Alchian, A. A. (1965). Some economics of property rights. *Il politico*, pages 816–829.

Alesina, A. and Tabellini, G. (1989). External debt, capital flight and political risk. *Journal of International Economics*, 27(3):199–220.

Alfaro, L., Kalemli-Ozcan, S., and Volosovych, V. (2005). Why doesn't capital flow from rich to poor countries? an empirical investigation. *NBER WORKING PAPER SERIES, Working Paper 11901*.

Alfaro, L., Kalemli-Ozcan, S., and Volosovych, V. (2007). *Capital flows in a globalized world: the role of policies and institutions*. University of Chicago Press.

Ali, A. and Walters, B. (2011). On the causes of capital flight from sub saharan africa. *Center for the Study of African Economies, Conference Papers, University of Oxford (Csae.ox.ac.uk)*.

Anderson, D. (2000). Master and servant in colonial kenya. *Journal of African History*, pages 459–485.

Anderson, D. (2005). *Histories of the hanged: The dirty war in Kenya and the end of empire*. WW Norton & Company.

Anderson, K. (2009). *Distortions to agricultural incentives: A global perspective, 1955-2007*. Palgrave Macmillan.

Andvig, J. C., Fjeldstad, O.-H., Amundsen, I., Sissener, T., and Søreide, T. (2001). *Corruption. A review of contemporary research*. Chr. Michelsen Institute.

Ang, J. B. (2008). Determinants of foreign direct investment in malaysia. *Journal of policy modeling*, 30(1):185–189.

Arndt, C. and Oman, C. (2006). *Uses and abuses of governance indicators*. OECD.

Aron, J. (2000). Growth and institutions: a review of the evidence. *The World Bank Research Observer*, 15(1):99.

Arthur, W. (1994). *Increasing returns and path dependence in the economy*. University of Michigan Press.

Aryeetey, E., Devarajan, S., Kanbur, R., and Kasekende, L. (2012). *The Oxford Companion to the Economics of Africa*. Oxford University Press.

Asiedu, E. (2006). Foreign direct investment in africa. *World Economy*, Vol.29(1):63–77.

Aw, Y. T., Tang, T.-C., et al. (2010). The determinants of inward foreign direct investment: The case of malaysia. *International Journal of Business and Society*, 11(1):59–76.

Ayittey, G. B. (1992). *Africa betrayed*. St. Martin's Press New York.

Azzimonti, M. and Sarte, P. (2007). Barriers to foreign direct investment under political instability. *ECONOMIC QUARTERLY-FEDERAL RESERVE BANK OF RICHMOND*, 93(3):287.

Banerjee, A. and LYER, L. (2005). History, institutions, and economic performance: The legacy of colonial land tenure systems in india. *The American Economic Review*, 95:4.

Bardhan, P. (1997). Corruption and development: a review of issues. *Journal of economic literature*, 35(3):1320–1346.

Bardhan, P. (2001). Distributive conflicts, collective action, and institutional economics. In M.Meier, G. and Stiglitz, J., editors, *Frontiers of development economics: The future in perspective*, chapter Development issues: settled and open, pages 227–268. World Bank and Oxford University Press.

Barrell, R. and Holland, D. (2000). Foreign direct investment and enterprise restructuring in central europe. *Economics of Transition*, 8(2):477–504.

Barro, R. (1991). Economic growth in a cross section of countries. *The Quarterly Journal of Economics*, 106(2):407–443.

Barro, R. (1996). Democracy and growth. *Journal of economic growth*, 1(1):1–27.

Barro, R. J. (2000). Rule of law, democracy, and economic performance. *2000 index of economic freedom*, pages 31–51.

Barzel, Y. (1989). *The economics of property rights*. Cambridge University Press New York.

Bates, R. (1981). States and markets in tropical africa: The political basis of agricultural policy. *Berkeley: University of California Press, series on social choice and political economy*.

Bates, R. (2005). *Beyond the miracle of the market: The political economy of agrarian development in Kenya*. Cambridge University Press.

Beck, T., Clarke, G., Groff, A., Keefer, P., and Walsh, P. (2001). New tools in comparative political economy: The database of political institutions. *The World Bank Economic Review*, 15(1):165.

Beier, A. L. and Ocobock, P. (2008). *Cast out: vagrancy and homelessness in global and historical perspective*, volume 8. Ohio University, Centre for International Studies.

Beja Jr, E., Junvith, P., and Ragusett, J. (2005). *"Capital Flight from Thailand", In Epstein Gerald A. (Eds), Capital Flight and Capital Controls in Developing Countries*, chapter 6, pages 142–171. Edward Elgar Publishing.

Benhabib, J., Corvalan, A., and Spiegel, M. M. (2011). Reestablishing the income-democracy nexus. Technical report, National Bureau of Economic Research.

BenYishay, A. and Betancourt, R. R. (2010). Civil liberties and economic development. *Journal of Institutional Economics*, 6(3):281.

Berman, B. and Lonsdale, J. (1992). *Unhappy valley: conflict in Kenya and Africa*, volume 2. James Currey.

Besley, T. and Ghatak, M. (2009). Property rights and economic development. In V, D. R. and M. Rosenzweig, e., editors, *Handbook of Development Economics*, chapter Property rights and economic development. Amsterdam: North Holland.

Bigsten, A. (2001). *History and policy of manufacturing in Kenya, in Bigsten and Kimuyu (Eds.)*, pages 7–30. Palgrave, London.

Bigsten, A. and Kimuyu, P. (2010). *The Manufacturing Sector," in (eds.) Christopher S. Adam, Paul Collier and Njuguna S. Ndung'u, Kenya Policies for Prosperity*, chapter Chapter 10, pages pp.243–266. Oxford: Oxford University Press.

Blankenburg, S. and Khan, M. (2012). *"Governance and Illicit Flows" in Reuter, P. (ed) Training Development?: Controlling Flows of Illicit Funds from Developing Countries*, chapter 2, pages 21–68. International Bank for Reconstruction and Development/ The World Bank, Washington DC 20433.

Blonigen, B. (2005). A review of the empirical literature on fdi determinants. *Atlantic Economic Journal*, 33(4):383–403.

Boix, C. (2011). Democracy, development, and the international system. *American Political Science Review*, 105(4):809–28.

Bollen, K. (1980). Issues in the comparative measurement of political democracy. *American Sociological Review*, 45(3):370–390.

Bollen, K. (1986). Political rights and political liberties in nations: An evaluation of human rights measures, 1950 to 1984. *Human Rights Quarterly*, 8:567.

Bollen, K. (1990). Political democracy: conceptual and measurement traps. *Studies in Comparative International Development (SCID)*, Vol.25, No.1(1):7–24.

Bollen, K. and Paxton, P. (2000). Subjective measures of liberal democracy. *Comparative Political Studies*, 33(1):58.

Boyce, J. and Ndikumana, L. (2001). Is africa a net creditor? new estimates of capital flight from severely indebted sub-saharan african countries, 1970-96. *Journal of Development Studies*, 38(2):27–56.

Brada, J. C., Kutan, A. M., and Vukšić, G. (2008). Capital flight from central and east european countries: Estimates and causes. Technical report, Citeseer.

Brada, J. C., Kutan, A. M., and Vuksic, G. (2013). Capital flight in the presence of domestic borrowing: Evidence from eastern european economies. *World Development*, 51:32–46.

Brainard, S. L. (1997). An empirical assessment of the proximity-concentration trade-off between multinational sales and trade. *American Economic Review*, 87(4):520–44.

Branch, D. and Cheeseman, N. (2008). Democratization, sequencing, and state failure in africa: Lessons from kenya. *African Affairs*, 108(430):1–26.

Brantley, C. (1981). *The Giriama and colonial resistance in Kenya, 1800-1920*. University of California Pr.

Brock, W. A. and Durlauf, S. N. (2001). What have we learned from a decade of empirical research on growth? growth empirics and reality. *The World Bank Economic Review*, 15(2):229–272.

Bromley, D. W. and Cernea, M. M. (1989). *The management of common property natural resources: Some conceptual and operational fallacies*, volume 57. World Bank Publications.

Burgess, R., Jedwab, R., Miguel, E., Morjaria, A., and Miquel, G. P. (2013). The value of democracy: Evidence from road building in kenya. *NBER working paper No.19398*.

Cappuccio, N. and Lubian, D. (2001). Estimation and inference on long-run equilibria: A simulation study. *Econometric Reviews*, 20(1):61–84.

Carr, D, L., Markusen J, R., and Maskus, K, E. (2001). Estimating the knowledge-capital model of the multinational enterprise. *American Economic Review,*, 91(3):693–708.

Carruth, A., Dickerson, A., and Henley, A. (2000). What do we know about investment under uncertainty? *Journal of Economic Surveys*, 14(2):119–154.

Cerra, V., Rishi, M., and Saxena, S. (2008). Robbing the riches: capital flight, institutions and debt. *The Journal of Development Studies*, 44(8):1190–1213.

Chang, H. (2006). Understanding the relationship between institutions and economic development: some key theoretical issues. *Revista de Economia Institucional*, Vol. 8, No. 14, First Semester 2006.

Chang, H. (2011). Institutions and economic development: theory, policy and history. *Journal of Institutional Economics*, 7(4):473.

Chang, K. and Cumby, R. (1991). Capital flight in sub-saharan african countries. *African External Finance in the 1990s. Washington, DC: World Bank*, pages 162–85.

Cheung, Y.-W. and Qian, X. (2010). Capital flight: China's experience. *Review of Development Economics*, 14(2):227–247.

Chiying, H. and Pu, C. (2004). Testing weak exogeneity in cointegrated system. In *Econometric Society 2004 Far Eastern Meetings*. Econometric Society.

Choong, C.-K. and Lam, S.-Y. (2010). The determinants of foreign direct investment in malaysia: A revisit. *Global Economic Review*, 39(2):175–195.

Choong, C.-K., Yusop, Z., and Soo, S.-C. (2005). Foreign direct investment and economic growth in malaysia: The role of domestic financial sector. *The Singapore Economic Review*, 50(02):245–268.

Clague, C., Keefer, P., Knack, S., and Olson, M. (1996). Property and contract rights in autocracies and democracies. *Journal of Economic Growth*, 1(2):243–276.

Coase, R. H. (1937). The nature of the firm. *economica*, 4(16):386–405.

Coase, R. H. (1988). The nature of the firm: influence. *Journal of Law, Economics, & Organization*, 4(1):33–47.

Coase, R. H. (1992). The institutional structure of production. *The American Economic Review*, 82(4):713–719.

Coate, S. and Morris, S. (1999). Policy persistence. *The American economic review*, 89(5):1327–1336.

Coldham, S. (1978). Land control in kenya. *Journal of African Law*, 22(1):63–77.

Collier, P., Hoeffler, A., and Pattillo, C. (2001). Flight capital as a portfolio choice. *The World Bank Economic Review*, 15(1):55–80.

Constitution of Kenya Review Commission, . (2005). The final report of the constitution of kenya review commission. Technical report, Law Office Nairobi.

Coray, M. (1978). The kenya land commission and the kikuyu of kiambu. *Agricultural History*, 52(1):179–193.

Cox, G. W. and McCubbins, M. D. (1986). Electoral politics as a redistributive game. *Journal of Politics*, 48(2):370–389.

Cuddington, J. T. (1986). *Capital flight: Estimates, issues, and explanations*. International Finance Section, Department of Economics, Princeton University Princeton, NJ.

Dalton, R. (2000). Citizen attitudes and political behavior. *Comparative political studies*, 33(6-7):912–940.

David, P. (1985). Clio and the economics of qwerty. *The American economic review*, 75(2):332–337.

David, P. (1994). Why are institutions the carriers of history'?: Path dependence and the evolution of conventions, organizations and institutions. *Structural change and economic dynamics*, 5(2):205–220.

Demsetz, H. (1967). Toward a theory of property rights. *The American Economic Review*, 57(2):347–359.

Diamond, J. (1997). Guns, germs, and steel: The fates of human societies. *reading*, 5:11.

Dickey, D., Bell, W., and Miller, R. (1986). Unit roots in time series models: Tests and implications. *The American Statistician*, 40(1):12–26.

Dickey, D. and Fuller, W. (1979). Distribution of the estimators for autoregressive time series with a unit root. *Journal of the American statistical association*, 74(366a):427–431.

Dixit, A. and Londregan, J. (1996). The determinants of success of special interests in redistributive politics. *Journal of Politics*, 58:1132–1155.

Dixit, A. and Pindyck, R. (1994). *Investment under uncertainty*. Princeton University Press.

Djankov, S., Glaeser, E., La Porta, R., Lopez-de Silanes, F., and Shleifer, A. (2003). The new comparative economics. *Journal of comparative economics*, 31(4):595–619.

Dornbusch, R. (1990). *Capital Flight: Theory, measurement, and policy issues; Capital Flight: Theory, measurement, and policy issues*. Number 2/3. IDB.

Dunning, J. (2001). The eclectic (oli) paradigm of international production: past, present and future. *International Journal of the economics of business*, 8(2):173–190.

Dupas, P. and Robinson, J. (2012). The (hidden) costs of political instability: Evidence from kenya's 2007 election crisis. *Journal of Development Economics*.

Durlauf, S. N. (2000). In R, B. and A., S., editors, *Macroeconomics and the Real World*. Oxford University Press, Oxford.

Easterly, W. and Levine, R. (2001). What have we learned from a decade of empirical research on growth? it's not factor accumulation: Stylized facts and growth models. *The World Bank Economic Review*, 15(2):177–219.

Easterly, W. and Levine, R. (2003). Tropics, germs, and crops: how endowments influence economic development. *Journal of monetary economics*, 50(1):3–39.

Eaton, J. (1987). Public debt guarantees and private capital flight. *The World Bank Economic Review*, 1(3):377–395.

Edwards, S. (1992). Capital flows, foreign direct investment, and debt-equity swaps in developing countries. Technical report, National Bureau of Economic Research.

Elkins, C. (2005). *Imperial reckoning: The untold story of Britain's gulag in Kenya*. Henry Holt and Co.

Elliott, G., Rothenberg, T. J., and Stock, J. H. (1996). Efficient tests for an autoregressive unit root. *Econometrica*, 64:813–36.

Elliott, G. T. J. R. and Stock., J. H. (1966). Efficient tests for an autoregressive unit root. *Econometrica*, Vol.64:813–836.

Engerman, S. and Sokoloff, K. (2000). Institutions, factor endowments, and paths of development in the new world. *Journal of Economic Perspectives*, 14(3):217–32.

Engle, R., Hendry, D., and Richard, J. (1983). Exogeneity. *Econometrica: Journal of the Econometric Society*, pages 277–304.

Engle, R. F. and Granger, C. W. (1987). Co-integration and error correction: representation, estimation, and testing. *Econometrica: Journal of the Econometric Society*, pages 251–276.

Epstein, G. (2005). *Capital flight and capital controls in developing countries*. Edward Elgar Publishing.

Ericsson, N. R. and MacKinnon, J. G. (2002). Distributions of error correction tests for cointegration. *The Econometrics Journal*, 5(2):285–318.

Evans, G. and Rose, P. (2007). Education and support for democracy in sub-saharan africa: testing mechanisms of influence. *Afrobarometer Working Paper*, Working paper no.75(75).

Evans, P. (1998). Using panel data to evaluate growth theories. *International Economic Review*, pages 295–306.

Everhart, S. S. and Sumlinski, M. A. (2001). *Trends in private investment in developing countries: statistics for 1970-2000 and the impact on private investment of corruption and the quality of public investment*. Number 44. World Bank Publications.

Fahnbulleh, M. (2006). In search of economic development in kenya: Colonial legacies & post-independence realities. *Review of African Political Economy*, pages 33–47.

Fatas, A. and Mihov, I. (2005). Policy volatility, institutions and economic growth. *The Review of Economics and Statistics*, (0).

Fedderke, J., De Kadt, R., and Luiz, J. (2001). Indicators of political liberty, property rights and political instability in south africa: 1935-97. *International Review of Law and Economics*, 21(1):103–134.

Fedderke, J. and Garlick, J. (2010). Measuring institutions: Indicators of political rights, property rights and political instability in malawi. *ERSA Working Paper No.165*.

Fedderke, J. and Klitgaard, R. (2013). How much do rights matter? *World Development*, 51:187–206.

Fedderke, J., Lourenco, I., and Gwenhamo, F. (2011). Alternative indices of political freedoms, property rights, and political instability for zambia. *Working Paper No.207*.

Feierabend, I. and Feierabend, R. (1966). Aggressive behaviors within polities, 1948-1962: a cross-national study. *Journal of Conflict Resolution*, pages 249–271.

Fine, B., Lapavitsas, C., and Pincus, J. (2004). *Development policy in the twenty-first century: Beyond the post-Washington consensus*. Routledge.

Fofack, H. and Ndikumana, L. (2010). Capital flight repatriation: Investigation of its potential gains for sub-saharan african countries*. *African Development Review*, 22(1):4–22.

Fosu, A. K. (2009). *Understanding the African growth record: The importance of policy syndromes and governance*. United Nations University, World Institute for Development Economics Research.

Freeman, J. (2012). Can time series methods be used to detect path dependence? In *NSF Sponsored Conference on path dependence, University of Minnesota, June 4-5, 2010.*

French, D. (2011). *The British Way in Counter Insurgency 1945-1967*. Oxford University Press.

Friedman, M. and Friedman, R. (2002). *Capitalism and freedom*. University of Chicago press.

Gajdeczka, P. and Oks, D. (1989). *Domestic Deficits, Debt Overhand and Capital Outflows in Developmg Countries. In R. OBrien & I. Iversen (Eds.), Finance and the International Economy*, chapter Finance and the International Economy. Oxford University Press.

Galbraith, J. S. (1972). *Mackinnon and East Africa 1878-1895: a study in the'new imperialism'*. London University Press.

Gallup, J., Sachs, J., and Mellinger, A. (1998). *Geography and economic development*. National Bureau of Economic Research Cambridge, Mass., USA.

Garrido, L., Kumar, P., and Randa, J. (2011). *"Growth Analysis and Diagnostics for Kenya" in Kenya Policies for Prosperity*. Oxford University Press.

Gatheru, R. (2005). *Kenya: from colonization to independence, 1888-1970*. McFarland & Company.

Geir Sundet, S. and Moen, E. (2009). The political economy of analysis of kenya, norad report 19/2009 for discussion. Technical report, Norwegian Agency for Development Cooperation (Norad).

Geweke, J., Meese, R., and Dent, W. (1983). Comparing alternative tests of causality in temporal systems: analytic results and experimental evidence. *Journal of Econometrics*, 21(2):161–194.

Gibbon, P. (1995). Markets, civil society and democracy in kenya. *Markets, civil society and democracy in Kenya.*

Giles, D. E., Giles, J. A., and McCann, E. (1992). Causality, unit roots and export-led growth: the new zealand experience. *The journal of international trade & economic development. - London : Routledge, ISSN 0963-8199, ZDB-ID 9130032.*, Vol. 1. No2(9206):p. 195–218.

Gimode, E. A. (2007). The role of the police in kenya's democratisation process. In Murunga, G. R. and Nasong'o, S. W., editors, *Kenya: The struggle for democracy*, chapter 8, pages 227–60. Zed Books.

Glaeser, E., La Porta, R., Lopez-de Silanes, F., and Shleifer, A. (2004). Do institutions cause growth? *Journal of Economic Growth*, 9(3):271–303.

Granger, C. W. (1969). Investigating causal relations by econometric models and cross-spectral methods. *Econometrica: Journal of the Econometric Society*, pages 424–438.

Granger, C. W. (1988). Some recent development in a concept of causality. *Journal of econometrics*, 39(1):199–211.

Greif, A. (2006). *Institutions and the path to the modern economy: Lessons from medieval trade*. Cambridge University Press.

Gries, T., Prior, U., and Sureth, C. (2012). A tax paradox for investment decisions under uncertainty. *Journal of Public Economic Theory*, 14(3):521–545.

Grindle, M. (2001). In quest of the political: The political economy of development policymaking. In Meier, G. M. and Stiglitz, J., editors, *Frontiers in Development Economics: The Future in Perspective*, pages 345–380. World Bank and Oxford University Press.

Guidolin, M. and La Ferrara, E. (2007). Diamonds are forever, wars are not: Is conflict bad for private firms? *American Economic Review*, 97(5):1978–1993.

Gwenhamo, F. (2011). Foreign direct investment in zimbabwe: The role of institutional and macroeconomic factors. *South African Journal of Economics*, 79(3):211–223.

Gwenhamo, F., Fedderke, J., and De Kadt, R. (2012). Measuring institutions indicators of political rights, property rights and political instability in zimbabwe. *Journal of Peace Research*, 49(4):593–603.

Gwenhamo, F., Fedderke, J., and Kadt, R. (2008). Measuring institutions: The zimbabwe case. *ERSA Working Paper No.112*.

Habib, M. and Zurawicki, L. (2002). Corruption and foreign direct investment. *Journal of international business studies*, pages 291–307.

Hall, R. and Jones, C. (1999). Why do some countries produce so much more output per worker than others?*. *Quarterly Journal of Economics*, 114(1):83–116.

Hansen, H. and Rand, J. (2006). On the causal links between fdi and growth in developing countries. *The World Economy*, 29:21–41.

Harbo, I., Johansen, S., Nielsen, B., and Rahbek, A. (1998). Asymptotic inference on cointegrating rank in partial systems. *Journal of Business & Economic Statistics*, 16(4):388–399.

Harrigan, J., Mavrotas, G., and Yusop, Z. (2002). On the determinants of capital flight: A new approach. *Journal of the Asia Pacific Economy*, 7(2):203–241.

Harris, R. (1992). Small sample testing for unit roots. *Oxford Bulletin of Economics and Statistics*, 54(4):615–625.

Harris, R. (1995). *Using cointegration analysis in econometric modelling*, volume 82. Prentice Hall London.

Hart, O. and Moore, J. (1990). Property rights and the nature of the firm. *Journal of political economy*, pages 1119–1158.

Heggstad, K. and Fjeldstad, O.-H. (2010). How banks assist capital flight from africa: A literature review. Technical report, The Norwegian Agency for Development Cooperation (NORAD).

Heid, B., Langer, J., and Larch, M. (2012). Income and democracy: Evidence from system gmm estimates. *Economics Letters*, 116(2):166–169.

Helmke, G. and Levitsky, S. (2004). Informal institutions and comparative politics: A research agenda. *Perspectives on politics*, 2(04):725–740.

Helpman, E, ., Melitz, M J, ., and Yeaple, S, . (2004). Export versus fdi with heterogeneous firms. *American Economic Review*, 94(1)::300–16.

Helpman, E. (1984). A simple theory of international trade with multinational corporations. *The Journal of Political Economy*, pages 451–471.

Hermes, N. and Lensink, R. (2001). Capital flight and the uncertainty of government policies. *Economics Letters*, 71(3):377–381.

Herzer, D., Klasen, S., and Nowak-Lehmann D, F. (2008). In search of fdi-led growth in developing countries: The way forward. *Economic Modelling*, 25(5):793–810.

Hindlip, L. C. A. (1905). *British East Africa, Past Present and Future*. Fisher and Unwin.

Hodgson, Geoffrey, M. (2009). "the ontology of institutional evolution". *A paper presented at Workshop on "Do Institutions Evolve", Schumann Centre in the European University Institute, 8-9, May*.

Hollingshead, A. (2008). The implied tax revenue loss from trade mispricing. Technical report, Global Financial Integrity (GFI).

Hornsby, C. (2013). *Kenya: A History Since Independence*. IB Tauris Publishers.

Ikiara, M. and Ndirangu, L. (2003). Developing a revival strategy for kenya's cotton-textile industry: A value chain apprach. *Kenya Institute for Public Policy Research and Analysis (KIPPRA) Working Paper No8.*, (8).

Ize, A. and Ortiz, G. (1987). Fiscal rigidities, public debt, and capital flight. *Staff Papers-International Monetary Fund*, pages 311–332.

Jaggers, K., Gurr, T., and Jaggers, K. (1995). Polity iii: Regime type and political authority, 1800-1994. *POLITY*, 1482:1504.

Jain, A. K. (1988). An agency theoretic explanation of capital flight. *Economics Letters*, 28(1):41–45.

Johansen, S. (1991). Estimation and hypothesis testing of cointegration vectors in gaussian vector autoregressive models. *Econometrica: Journal of the Econometric Society*, pages 1551–1580.

Johansen, S. (1992). Testing weak exogeneity and the order of cointegration in uk money demand data. *Journal of Policy Modeling*, 14(3):313–334.

Johansen, S. and Juselius, K. (1990). Maximum likelihood estimation and inference on cointegration with applications to the demand for money. *Oxford Bulletin of Economics and statistics*, 52(2):169–210.

Kahn, J. and Ogaki, M. (1992). A consistent test for the null of stationarity against the alternative of a unit root. *Economics Letters*, 39(1):7–11.

Kant, C. (1996). *Foreign direct investment and capital flight*. International Finance Section, Department of Economics, Princeton University.

Kar, D. and Cartwright-Smith, D. (2008). Illicit financial flows from developing countries: 2002-2006,. Technical report, Global Financial Integrity (GFI).

Kar, D. and Cartwright-Smith, D. (2010). *Illicit financial flows from Africa: Hidden resource for development*. Washington DC: Global Financial Integrity,.

Karimi, M. S., Yusop, Z., and Law, S. H. (2010). Location decision for foreign direct investment in asean countries: A topsis approach. *International Research Journal of Finance and Economics*, 36(1):196–207.

Kaufmann, D. and Kraay, A. (2002). Growth without governance. *World Bank Policy Research Working Paper 2928*, (2928).

Kaufmann, D., Kraay, A., and Mastruzzi, M. (2003). Governance matters iii: Governance indicators for 1996-2002. *World Bank Policy Research Working Paper No. 3106*.

Keefer, P. and Knack, S. (1995). Institutions and economic performance: Cross-country tests using alternative institutional measures. *Economics and Politics*, 7(3):207–227.

Khan, M. and Ajayi, S. (2000). *External debt and capital flight in Sub-Saharan Africa*. International Monetary Fund.

Khan, M. S. and Haque, N. U. (1985). Foreign borrowing and capital flight: A formal analysis. *Staff Papers-International Monetary Fund*, pages 606–628.

Kinyatti, W. M. (2008). *History of Resistance: 1884-2002*. New York:, Mau Mau Research Center.

Knight, J. (1992). *Institutions and social conflict*. Cambridge University Press.

Kurtz, M. and Schrank, A. (2007). Growth and governance: Models, measures, and mechanisms. *Journal of Politics*, 69(2):538–554.

Kwiatkowski, D., Phillips, P., Schmidt, P., and Shin, Y. (1992). Testing the null hypothesis of stationarity against the alternative of a unit root: How sure are we that economic time series have a unit root? *Journal of econometrics*, 54(1):159–178.

La Porta, R., Lopez-de Silanes, F., Shleifer, A., and Vishny, R. (1998). Law and finance. *Journal of political Economy*, 106(6):1113–1155.

La Porta, R., Lopez-de Silanes, F., Shleifer, A., and Vishny, R. (1999). The quality of government. *Journal of Law, Economics, and organization*, 15(1):222–279.

La Porta, R., Lopez-de Silanes, F., Shleifer, A., and Vishny, R. (2000). Investor protection and corporate governance. *Journal of financial economics*, 58(1):3–27.

Lan, Y., Wu, Y., and Zhang, C. (2010). Capital flight from china: further evidence. *Journal of International Finance and Economics*, 10(2).

Lauth, H.-J. (2000). Informal institutions and democracy. *Democratization*, 7(4):21–50.

Le, Q. and Zak, P. (2006). Political risk and capital flight. *Journal of International Money and Finance*, 25(2):308–329.

Lensink, R., Hermes, N., and Murinde, V. (1998). The effect of financial liberalization on capital flight in african economies. *World Development*, 26(7):1349–1368.

Letete, E., Mare, S., and Fedderke, J. (2011). Evolution and measurement of institutions in kenya, 1880-2010: is there evidence of path dependence and interdependence? In *AERC Biannual Conference, 2011, December, Nairobi, Kenya.*

Lipset, S. (1959). Some social requisites of democracy: Economic development and political legitimacy. *The American Political Science Review*, 53(1):69–105.

Lipsey, R. (1999). The location and characteristics of us affiliates in asia. Technical report, National Bureau of Economic Research.

Loayza, N. V., Ranciere, R., Servén, L., and Ventura, J. (2007). Macroeconomic volatility and welfare in developing countries: An introduction. *The World Bank Economic Review*, 21(3):343–357.

Loughran, G. (2010). *Birth of a Nation: the story of a newspaper in Kenya*. IB Tauris.

Lucas, R. (1990). Why doesn't capital flow from rich to poor countries? *The American Economic Review*, 80(2):92–96.

Luiz, J., Pereira, L., and Oliveira, G. (2011). Constructing institutional measures: Indicators of political and property rights in mozambique, 1900-2005. *Working Paper No.209*.

Luutkepohl, H., Saikkonen, P., and Trenkler, C. (2002). Maximum eigenvalue versus trace tests for the cointegrating rank of a var process. *The Econometrics Journal*, 4(2):287–310.

Markusen, J. (1984). Multinationals, multi-plant economies, and the gains from trade. *Journal of International Economics*, 16(3-4):205–26.

Markusen, J. and Maskus, K. (2001). General-equilibrium approaches to the multinational firm: A review of theory and evidence. Technical report, National Bureau of Economic Research.

Markusen, J. and Maskus, K. (2002). Discriminating among alternative theories of the multinational enterprise. *Review of International Economics*, 10(4):694–707.

Mattes, R. and Mughogho, D. (2009). *The limited impacts of formal education on democratic citizenship in Africa*. Centre for Social Science Research.

Miller, T., Holmes, K., and Kim, A. (2004). *Index of economic freedom*. Heritage Books (DC).

M'Inoti, K. (1991). Freedom of expression and the law of sedition in post independence kenya. *A paper presented at I.C.J Seminar Naivasha, 19th-21st September, 1991*, pages 7–9.

Montiel, P. and Serven, L. (2006). Macroeconomic stability in developing countries: How much is enough? *The World Bank Research Observer*, 21(2):151–178.

Morrison, D. and Stevenson, H. (1971). Political instability in independent black africa: more dimensions of conflict behavior within nations. *Journal of Conflict Resolution*, pages 347–368.

Mosley, P. (1980). *The settler economies: studies in the economic history of Kenya and Southern Rhodesia 1900-1963*. PhD thesis, University of Cambridge.

Mueller, S. D. (2008). The political economy of kenya's crisis. *Journal of Eastern African Studies*, 2(2):185–210.

Mwakio, P. (2005, May 19). State changes tune on looted billions abroad. *East Africa Standard News Paper*, pages 5–6.

Narayan, P. K. (2005). The saving and investment nexus for china: evidence from cointegration tests. *Applied economics*, 37(17):1979–1990.

Ndikumana, L. and Boyce, J. (2003). Public debts and private assets: explaining capital flight from sub-saharan african countries. *World Development*, 31(1):107–130.

Ndikumana, L. and Boyce, J. (2008). New estimates of capital flight from sub-saharan african countries: linkages with external borrowing and policy options. *PERI Working Papers*, page 144.

Ndikumana, L. and Boyce, J. (2010). Measurement of capital flight: Methodology and results for sub-saharan african countries. *African Development Review*, 22(4):107–130.

Ndikumana, L. and Boyce, J. (2011). Capital flight from sub-saharan africa: linkages with external borrowing and policy options. *International Review of Applied Economics*, 25(2):149–170.

Ndikumana, L. and Boyce, J. (2012a). Capital flight from north african countries. *PERI Working Papers*.

Ndikumana, L. and Boyce, J. (2012b). Capital flight from sub-saharan african countries: Updated estimates, 1970-2010. *PERI Research Report (October 2012). Available at SSRN: http://ssrn.com/abstract=2202215 or http://dx.doi.org/10.2139/ssrn.2202215*.

Ndikumane, L. and Boyce, J. (2011). *Africa's Odious Debt: How Foreign Loans and Capital Flight Bled a Continent*. ZED Books Limited.

Ndulu, B. J., O'Connell, S. A., Bates, R. H., Collier, P., Soludo, C. C., et al. (2008). *The political economy of economic growth in Africa, 1960-2000*, volume 2. Cambridge University Press.

Ndungu, P. (2006). Tackling land related corruption in kenya. *Unpublished manuscript*.

Ndung'u, Njuguna, S. and Ngugi, R. W. (1999). Adjustment and liberalization in kenya: the financial and foreign exchange markets. *Journal of International Development*, 11(3):465–491.

Nelson, R. (2009). "do institutions evolve". *A Paper Prepared for the Workshop on "Do Institutions Evolve", Schumann Centre in the European University Institute, Florence Italy, 8-9, May*.

Ng'eno, N. (2000). *"Capital Flight in Kenya" in Khan, M.S. and Ajayi, S.I., (Eds), External Debt and Capital Flight in Sub-Saharan Africa*, chapter Capital Flight in Kenya, pages 301–320. Washington D.C.: International Monetary Fund.

Noman Akbar, . and Stiglitz E.Joseph, . (2012). African development prospects and possibilities. In Aryeetey, E., Devarajan, S., Kanbur, R., and Kasekende, L., editors, *The Oxford Companion to the Economics of Africa*, chapter African Development Prospects and Possibilities, pages 34–40. Oxford University Press.

North, D. (1987a). Institutions, transaction costs and economic growth. *Economic Inquiry*, 25(3):419–428.

North, D. (1987b). Institutions, transaction costs and economic growth. *Economic Inquiry*, 25(3):419–428.

North, D. (1990). *Institutions, institutional change and economic performance*. Cambridge University Press, Cambridge.

North, D. (1993). Institutions and credible commitment. *Journal of Institutional and Theoretical Economics*, 149:11–11.

North, D., Davis, L. E., and Smorodin, C. (1971). *Institutional change and American economic growth*. Cambridge University Press.

North, D. and Thomas, R. (1973a). *The rise of the Western World: A new Economic History*. Cambridge University Press.

North, D. C. (2006). *Understanding the process of economic change*. Academic Foundation.

North, D. C. (2008). Institutions and the performance of economies over time. In *Handbook of new institutional economics*, pages 21–30. Springer.

North, D. C. and Thomas, R. P. (1973b). *The rise of the western world: A new economic history*. Cambridge [Eng.]: University Press.

Ochieng, W. R. and Maxon, R. M. (1992). *An economic history of Kenya*. East African Publishers.

Odhiambo-Mbai, C. (2003). Public service accountability and governance in kenya since independence. *African Journal of Political Science*, 8(1):113–145.

O'Donnell, G. (1996). Another institutionalization: Latin america and elsewhere. *Lua Nova: Revista de Cultura e Política*, (37):5–31.

Ojienda, T. (2008). *Conveyancing; Principles and Practice*. Law Africa (K) Publishing Ltd, Nairobi, Kenya.

Okoth-Ogendo, H. (1991). *Tenants of the crown: Evolution of agrarian law and institutions in Kenya*. ACTS Press, African Centre for Technology Studies (Nairobi, Kenya).

Okoth-Ogendo, H., Claassens, A., and Cousins, B. (2008). The nature of land rights under indigenous law in africa. *Land, Power and Custom*.

Overton, J. (1988). The origins of the kikuyu land problem: Land alienation and land use in kiambu, kenya, 1895-1920. *African studies review*, 31(2):109–126.

Oxley, L. and Greasley, D. (1998). Vector autoregression, cointegration and causality: testing for causes of the british industrial revolution. *Applied Economics*, 30(10):1387–1397.

Page, S. (2006). Path dependence. *Quarterly Journal of Political Science*, 1(1):87–115.

Pande, R. and Udry, C. (2005). Institutions and development: A view from below. *Yale University Economic Growth Center Discussion Paper No. 928*.

Pesaran, M. and Shin, Y. (1998). An autoregressive distributed-lag modelling approach to cointegration analysis. *ECONOMETRIC SOCIETY MONOGRAPHS*, 31:371–413.

Pesaran, M., Shin, Y., and Smith, R. (1996). Testing for the'existence of a long-run relationship'. *DAE Working Paper No. 9622. Department of Applied Economics, University of Cambridge, Cambridge*.

Pesaran, M., Shin, Y., and Smith, R. (2001). Bounds testing approaches to the analysis of level relationships. *Journal of applied econometrics*, 16(3):289–326.

Peter, E. (2002). "corruption is unsustainable". *Statement by Peter Eigen, Chairman of Transparency International, on the launch of the Corruption Perceptions Index*.

Phillips, P. C. and Hansen, B. E. (1990). Statistical inference in instrumental variables regression with i (1) processes. *The Review of Economic Studies*, 57(1):99–125.

Phillips, P. C. and Loretan, M. (1991). Estimating long-run economic equilibria. *The Review of Economic Studies*, 58(3):407–436.

Polity, I. (2011). Polity iv project: Political regime characteristics and transitions, 1800–2004. *Center for International Development and Conflict Management, University of Maryland*.

Przeworski, A. (2004). The last instance: Are institutions the primary cause of economic development? *European journal of Sociology*, 45(2):165–188.

Przeworski, A. and Limongi, F. (1993). Political regimes and economic growth. *The Journal of Economic Perspectives*, 7(3):51–69.

Read, R. (2008). Foreign direct investment in small island developing states. *Journal of International Development*, 20(4):502–525.

Reinhart, C. and Kenneth, R. (2004). Serial default and the paradox" of rich to poor capital flows. *American Economic Review Papers and Proceedings*, 94:52–58.

Republic of Kenya, . (2008). Report of the commission of inquiry into the post-election violence in kenya. Technical report, Kenya Government.

Reuter, P. (2012). *Draining development?: Controlling flows of illicit funds from developing countries*. World Bank Publications.

Rigobon, R. and Rodrik, D. (2005). Rule of law, democracy, openness, and income. *Economics of Transition*, 13(3):533–564.

Robinson, J. A. (2010). Elites and institutional persistence. *United Nations University-Wider Working Paper No. 2010/85*.

Rodrik, D. (2005). Growth strategies. *Handbook of economic growth*, 1:967–1014.

Rodrik, D. (2006). Goodbye washington consensus, hello washington confusion? a review of the world bank's economic growth in the 1990s: learning from a decade of reform. *Journal of Economic literature*, 44(4):973–987.

Rodrik, D. (2008). Second-best institutions. *American Economic Review: Papers and Proceedings*, Vol.2:100–104.

Rodrik, D., Subramanian, A., and Trebbi, F. (2002). *Institutions rule: the primacy of institutions over geography and integration in economic development*. National Bureau of Economic Research Cambridge, Mass., USA.

Rummel, R. and Tanter, R. (1974). *Dimensions of conflict behavior within and between nations, 1955-1960*. Inter-University Consortium for Political Research.

R.W., N. (2010). Institutional factors and fdi flows: Implications for kenya. *The Icfai University Journal of Architecture, Vol. II No.1*.

Sachs, J. (2001). *Tropical underdevelopment*. National Bureau of Economic Research Cambridge, Mass., USA.

Sachs, J., Warner, A., Åslund, A., and Fischer, S. (1995). Economic reform and the process of global integration. *Brookings papers on economic activity*, 1995(1):1–118.

Saleh, J. (2004). *Property rights institutions and investment*, volume 3311. World Bank.

Salvatore, D. (1991). Trade protection and foreign direct investment in the us. *The ANNALS of the American Academy of Political and Social Science*, 516(1):91–105.

Sartori, G. (1987). *The theory of democracy revisited*. Chatham, NJ: Chatham House.

Scully, G. (1988). The institutional framework and economic development. *The Journal of Political Economy*, Vol. 96, No. 3:652–662.

Sender, J. (1999). Africa's economic performance: Limitations of the current consensus. *The Journal of Economic Perspectives*, 13(3):89–114.

Seyoum, B. (2009). Formal institutions and foreign direct investment. *Thunderbird International Business Review*, 51(2):165–181.

Sheets, N. (1995). Capital flight from the countries in transition: some theory and empirical evidence. *International Finance Discussion Papers Number 514*, (514).

Sheets, N. (1996). Capital flight from the countries in transition: Some empirical evidence. *The Journal of Policy Reform*, 1(3):259–277.

Shirley, M. (2008). Institutions and development. *Handbook of new institutional economics*, pages 611–638.

Sirowy, L. and Inkeles, A. (1990). The effects of democracy on economic growth and inequality: A review. *Studies in Comparative International Development (SCID)*, 25(1):126–157.

Sorrenson, M. (1968). *Origins of European settlement in Kenya*, volume 2. Oxford University Press.

Southall, R. (2005). The ndungu report: land & graft in kenya. *Review of African Political Economy*, 32(103):142–151.

Stiglitz, J. (2001). Development issues: settled and open. In M.Meier, G. and Stiglitz, J., editors, *Frontiers of development economics: The future in perspective*, chapter Development issues: settled and open, pages 227–268. World Bank and Oxford University Press.

Szirmai, A. (2005). *The dynamics of socio-economic development: an introduction*. Cambridge University Press.

Tang, C. F., Yip, C. Y., and Ozturk, I. (2014). The determinants of foreign direct investment in malaysia: A case for electrical and electronic industry. *Economic Modelling*, 43:287–292.

Tanter, R. (1966). Dimensions of conflict behavior within and between nations, 1958-60. *Journal of Conflict Resolution*, pages 41–64.

Taylor, M. M. (1992). Formal versus informal incentive structures and legislator behavior: Evidence from costa rica. *The Journal of Politics*, 54(04):1055–1073.

United Nations Development Programme, . (2010). Human development report 2010. Technical report, UNDP.

Voigt, S. (2007). *How (Not) to Measure Institutions*. Marburg Centre for Institutional Economics, Phillips University, Marburg, Germany.

Voigt, S. (2013). How (not) to measure institutions. *Journal of Institutional Economics*, 9(01):1–26.

Wahome, G. (2007). Kenya state of corruption report. Technical report, Clari-press Ltd.

Waithima, A. K. (2011). *The Role of Harambee Contributions in Corruption: Experimental Evidence from Kenya (unpublished PhD thesis)*. PhD thesis, University of cape Town, School of Economics.

Wakhungu, J., Huggins, C., and Nyukuri, E. (2008). Land tenure and violent conflict in kenya. *African Centre for Technology Studies, Nairobi Kenya*.

Wanjala, S, C. (2000). *Land ownership and use in Kenya: Past present and future in in Wanjala, S C (2000) Essays on land law: The reform debate in Kenya*. University of Nairobi Press, Nairobi, Kenya.

Wanjala, S. and Kibwana, K. (1997). *Democratization and Law Reform in Kenya*. Claripress Limited, Nairobi.

Widner, J. A. (1992). *The rise of a party-state in Kenya: from" Harambee" to" Nyayo!"*. University of California Press.

Williamson, O. E. (2000). The institutions and govermance of economic development and reform. In *Proceeings of the World Bank Annual Conference on Development Economucs*. Oxford: Oxford University.

Xu, C. (2011). The fundamental institutions of china's reforms and development. *Journal of Economic Literature*, 49(4):1076–1151.

Yalta, A. and Yalta, A. (2012). Does financial liberalization decerease capital flight? a panel causality analysis. *International Review of Economics and Finance*, 22:92–100.

Zaaruka, B. and Fedderke, J. (2011a). Indicators of political and economic institutions in tanzania: 1884 - 2008. *Working Paper, 231*.

Zaaruka, B. and Fedderke, J. (2011b). Measuring institutions: Indicators of political and economic institutions in namibia: 1884-2008. *Working Paper 236.*

Zebregs, H. (1998). Can the neoclassical model explain the distribution of foreign direct investment across developing countries? *IMF Working Paper /98/139*, page 98.

Zhang, K. H. (2001). Does foreign direct investment promote economic growth? evidence from east asia and latin america. *Contemporary Economic Policy*, 19(2):175–185.

APPENDIX E

Table 6.1: List of Statutes and subsidiary Legislation used in the Thesis

1.	Crown Ordinance of 1924	30.	The Lennox-Boyd Constitution of 1957
2.	The East Africa Order in Council, No.14 of 1879	32.	The Independence Constitution of Kenya of 1963
3.	The Native Courts Regulations, No.15 of 1897	33.	The Lyttleton Constitution of Kenya of 1957
4.	The Removal of Natives Ordinance, No.17 of 1897	34.	The Preservation of Public Security Act, No.189 of 1966
5.	The Removal of Natives Ordinance, No.18 of 1909	35.	The Constitution of Kenya (Amendment) Act, No.14 of 1964
6.	The Vagrancy Ordinance of 1896	36.	The Constitution of Kenya (Amendment) Act, No.40 of 1966
7.	The African Passes Ordinance of 1900	37.	The Constitution of Kenya (Amendment) Act, No.17 of 1966
8.	The Labour Regulations of 1898	38.	The Constitution of Kenya (Amendment) Act, No.16 of 1968
9.	The Legislative Council Ordinance, No.16 of 1919	39.	The Constitution of Kenya (Amendment) Act, No.14 of 1975
10.	The Hut Tax Regulations of 1901	40.	The Constitution of Kenya (Amendment) Act, No.7 of 1982
11.	The Native Porters and Labour Regulations of 1902	41.	The Constitution of Kenya (Amendment) Act, No.14 of 1986
12.	The Master and Servants Ordinance of 1906	42.	The Constitution of Kenya (Amendment) Act, No.20 of 1987
13.	The Natives Hut and poll Ordinance, No.2 of 1910	43.	The Constitution of Kenya (Amendment) Act, No.4 of 1988
14.	The Native Porters and Labour Regulations of 1902	44.	The Constitution of Kenya (Amendment) Act of 2004
15.	The Poll and Hut Tax Ordinance of 1901	45.	The Constitution of Kenya Review Act of 2008
16.	The Native Authority Ordinance of 1912	46.	The Constitution of Kenya (Amendment) Act of 2008
17.	The Native Registration Ordinance, No.15 of 1915	47.	The Preservation of Security (Amendment) Bill of 1994
18.	The Newspapers Ordinance of 1906	48.	The Elections Offences Act of 1998
19.	The British Protectorate (Defence) Order in Council, No.181 of 1916	49.	The Peaceful Assembly Bill of 1998
20.	The Local Authority Ordinance (Amendment) of 1924	50.	The Political Parties Act of 2002
21.	The Special Districts (Amendment) Ordinance of 1934	51.	The Societies Act (Amendment) of 2002
22.	The Stock and Theft Ordinance, No.18 of 1933	52.	The Indemnity Repeal Act of 1968
23.	The Special Districts (Administration) Ordinance of 1934	53.	The Indemnity (Repeal) Act of 2010
24.	The Emergency Powers Order in Council of 1939	54.	The Official Secrets Act (Repeal) of 2009
25.	The Emergency Powers Ordinance, No.12 of 1948	55.	The Chiefs Authority Act of 1994
26.	The Mau-Mau Emergency Regulations of 1952	56.	The Public Order Bill of 1994
27.	The Public Order Ordinance, No.2 of 1950	57.	The Property Act of India of 1882
28.	The Lancaster Constitution of 1958	58.	The Land Regulations of 1897
29.	The Constitution of Kenya of 1963	59.	The East Africa Acquisition of Lands Order in Council of 1898

Table 6.2: List of Statutes and subsidiary Legislation used in the Thesis

1.	The Crown Lands Ordinance of 1902	30.	The Land Consolidation Act of 1959
2.	The East Africa Acquisition of Lands Order in Council of 1897	32.	The Land Order in Council of 1960
3.	The Crown Lands Ordinance of 1897	33.	The Registered Land Act, No.25 of 1963
4.	The East Africa (Lands) Order in Council of 1895, 1898, 1901	34.	The Constitution of Kenya of 1963
5.	The Land Regulations of 1897	35.	The Constitution of Kenya (Amendment) Act, No.14 of 1965
6.	The Crown Lands Ordinance, No.2 of 1902	36.	The Land Control (Special Areas), No.34 of 1967
7.	The Land Rules and Regulations of 1903	37.	The Agricultural (Amendment) Act of 1963
8.	The Crown Lands Bill of 1908	38.	The Land Acquisition Act, No.47 of 1968
9.	The Crown Lands Ordinance, No.22 of 1915	39.	The Constitution of Kenya (Amendment) Act, No.28 of 1965
10.	The Kenya Annexation Order in Council of 1920	40.	The Land Control (Special Areas) Act, No.34 of 1967
11.	The Production and Livestock Ordinance, No.3 of 1926	41.	The Agricultural (Amendment) Act of 1963
12.	The Agricultural and Produce Exports Ordinance, No.44 of 1921	42.	The Land Acquisition Act, No.47 of 1968
13.	The Natives Lands Trust Ordinance, No.9 of 1930	43.	The Land (Group Representative) Act, No.36 of 1968
14.	The Native Tribunals Ordinance, No.36 of 1934	44.	The Land Adjudication Act, No.33 of 1968
15.	The Native Lands Trust (Amendment) Ordinance, No.28 of 1938	45.	The land Control (Amendment) Act of 1981
16.	The Native Lands Trust Ordinance, No.9 of 1930	46.	The Magistrates Jurisdiction (Amendment) Act of 1981
17.	The Crown Lands (Amendment) Ordinance, No.27 of 1938	47.	The Trust Land Act (Amendment) of 1982
18.	The Kenya Ordinance, No.28 of 1938	48.	The Chiefs Authority Act of 1982
19.	The Native Authority Ordinance, No.20 of 1940	49.	The Local Government Act of 1963
20.	The Agricultural Ordinance, No.8 of 1955	50.	The Constitution of Kenya (Amendment) Act of 1992
21.	The Native Lands Registration Ordinance, No.27 of 1959	51.	The Constitution of Kenya (Amendment) Act of 2001
22.	The Lands Control (Native Lands) Ordinance of 1959	52.	The Constitution of Kenya (Amendment) Act of 2002
23.	The Kenya's Native Areas (Amendment) Order in Council of 1958	53.	The Draft Land Bill of 2007
24.	The Lands Control (Special Areas) Ordinance, No.28 of 1959	54.	The New Constitution of Kenya of 2010
25.	The Land Constitution Act of 1959	55.	The Foreign Jurisdiction Act of 1890
26.	The Land Order in Council of 1960	56.	The Land Regulations of 1894, 1897
27.	The Constitution of Kenya of 1963	57.	The East Africa Order in Council of 1889
28.	The Constitution of Kenya (Amendment) Act, No.14 of 1964	58.	The Crown Lands Ordinance, No.21 of 1902
29.	The Land Control (Special Areas) act, No.34 of 1967	59.	The East Africa Order in Council of 1895, 1897, 1901

Table 6.3: List of Statutes and subsidiary Legislation used in the Thesis

1.	The Crown Land Ordinance of 1908	30.	The Anti-Corruption and Economic Crime Act of 2003
2.	The Land Title Ordinance of 1908	32.	The Lancaster Constitution of 1962
3.	The Crown Lands Ordinance, No.22 of 1915		
4.	The Registration of Titles Ordinance, No.26 of 1920		
5.	The British Settlement Act of 1887		
6.	The Native Lands Trust Ordinance, No.9 of 1930		
7.	The Crown Land Ordinance (Amendment), No.27 of 1938		
8.	The Kenya (Highlands) Order in Council of 1939		
9.	The Kenya (Native Areas) Order in Council of 1939		
10.	The Farmers Assistance Ordinance, No.18 of 1936		
11.	The Chattels Transfer Ordinance, No.24 of 1930		
12.	The Land Control Registration Ordinance, No.27 of 1959		
13.	The Kenya Native Areas (Amendment) Order in Council of 1958		
14.	The Native Land Registration Ordinance, No.27 of 1959		
15.	The Land Control Act of 1959		
16.	The Land Order in Council of 1960		
17.	The Agricultural (Amendment) Ordinance, No.47 of 1960		
18.	The Kenya Land Ordinance of 1960		
19.	The Land Control (Special Areas) Regulations of 1961		
20.	The Development and Use of Land (Planning) Regulations of 1961		
21.	The Government Land Act of 1960		
22.	The Constitution of Kenya (Amendment) Act, No.14 of 1965		
23.	The Constitution of Kenya (Amendment) Act, No.5 of 1979		
24.	The Magistrates Jurisdiction (Amendment) of 1981		
25.	The Land Control of 1981 (Amendment) of 2001		
26.	The Land Control (Amendment) Regulations of 2001		
27.	The Industrial Property Act of 2001		
28.	The Trade Marks Act and Copy Rights Act of 2001		
29.	The Public Office Act of 2003		