INSTITUTIONAL CHANGE
IN THE LONG SHADOW OF ELITES

ESSAYS ON INSTITUTIONS, HUMAN CAPITAL AND
ETHNICITY IN DEVELOPING COUNTRIES
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Essays on Institutions, Human Capital and
Ethnicity in Developing Countries

Dissertation

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To my parents
for the monumental values they have taught me through their humble life
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Institutional change in the long shadow of elites
Introduction

The search for the ultimate source of the wealth and poverty of nations has not subsided since the days of Adam Smith. Factors such as geography and culture have been deemed to be the ultimate drivers of economic growth and development (see, for example, Landes (1998) and Sachs (2003) for geography and Weber (1930) for culture). However, with countries characterized by similar cultural and geographic features ending up on diverging paths of development, institutions seem to have trumped all other causes in both the short and long runs (Rodrik et al. (2004), Acemoglu and Robinson (2012)). Following the groundbreaking work by Douglass North (1981, 1990), the economic literature of the last two decades has documented growing consensus over the impact of institutions on economic performance (Knack and Keefer (1995), Hall and Jones (1999), Acemoglu et al. (2001), Glaeser et al. (2004)).

However, even those who are most assertive about the primacy of institutions for economic development are less forthcoming when it comes to explaining the causes and mechanisms of institutional change. Institutional change is commonly presented as an incremental process that is subject to several historical contingencies. Moreover, institutions are considered to be a function of the level of income, which they are supposed to be influencing. This problem of reverse causality has hampered the effort of mainstream economists to formalize and test different theories of institutional change. It is only recently that the issue of institutional change is brought to the fore by a wave of predominantly theoretical studies (Greif and Laitin (2004), Aoki (2007), Acemoglu and Robinson (2008), Hoff and Stiglitz (2008)). Although this new trend has opened some avenues for theoretical discourse, the existing models are so generic that they leave little space to allow for the specific social and political context in contemporary developing countries. Moreover, most explanations fail to incorporate the potential interaction between institutional change and more traditional drivers of socioeconomic development such as education.

In this dissertation, I aim to investigate the link between the level and distribution of human capital and institutional change in societies where elites have a privileged access to political and economic organizations. In order to understand why elites maintain
such privileges in certain societies in the first place, I also study the social and institutional fundamentals that may contribute to elite domination in a given society. Specifically, I seek to analyze the tendency of elites’ influence to persist longer in ethnocentric societies by examining the impact of early institutions on the political salience of ethnicity. The dissertation is composed of three essays attempting to address those questions from different angles using a range of theoretical and empirical approaches.

By setting out to investigate the link between human capital and institutional change, I have already fixed the focus of the analysis on the endogenous aspect of institutional change. This stands in contrast with the existing literature that puts substantial weight on critical junctures shaping the path of institutional change exogenously. Critical junctures are important; but institutional change in the medium-run is more likely to be influenced by the rather subtle differences in factors such as elite human capital and ethnic relations. The emphasis on elites is warranted by the assumption that the nature of the relationship among elites is an important precursor to the type of institutional change that will take place in the broader society. Even in the least-institutionalized of societies, for political order to be maintained, the interaction among the elites should be governed by some sort of supra-elite pact or organization. Whether or not the governance of the relationship among the elites is evolving to be more impersonal and rule-based will determine the quality of society-wide institutions in the future. The history of institutional change in Western Europe spanning over the last five hundred years testifies to the critical role elites could play in determining the nature of social orders (North et al., 2009).

The choice of human capital as a major explanatory variable for institutional change can be attributed to theoretical and empirical curiosities originating in the economic development literature. Theoretically, the well-established role of human capital as a key driver of endogenous growth invites a closer look at the relationship between human capital and institutional change in search of parallel mechanisms that may be lying behind the process of endogenous institutional change. If human capital generates growth by shifting the technological frontier in the production of goods and services, it may as well have the potential to enhance institutional change by transforming the incentive constraints set in place by exogenous factors such as culture and historical junctures. From the point of view of the empirical evidence, however, a bird’s eye view of the experience of developing countries does not lend itself to straightforward conclusions. The substantial rise in school enrollment at all tiers of education in developing countries during the last four or five decades has not been matched by a corresponding change in the governance of those countries (Pritchett, 2001). When one contrasts Pritchett’s sobering assessment with that of other authors (for example, Barro (1999), Glaeser et al. (2004), and Castello-Climent (2008)) who document the
positive impact of education on political institutions, the inconclusiveness of the current debate becomes apparent.

Elites, by definition, have a disproportionate role in shaping the path of institutional change and influencing policy making in any society. However, the degree of leverage elites can wield may vary from one society to the other. In this dissertation, I single out ethnicity as one of the most important parameters determining the persistence and reproduction of elites’ influence in an otherwise changing environment. Practically, elite persistence can take different forms ranging from dynastic successions in de jure non-democratic polities to ‘captured democracies’ where the de facto influence of the elites persist in seemingly pluralist polities (Acemoglu and Robinson, 2008). In order to get an idea of what aspects of ethnicity the elites might use to influence institutional change, it will be useful to take a quick look at the empirical relationship between different indicators of ethnicity and economic institutions documented in the literature. The index of ethnic polarization measures the size distribution of ethnic groups with the highest score of polarization assigned to bipolar societies, having their population split in half between two ethnic groups. Using this measurement, Keefer and Knack (2002) show that ethnic polarization has a strong and robust negative impact on property rights. The more traditional index of ethnic composition, i.e. the index of ethno-linguistic fractionalization, which measures overall diversity in a given society without controlling for relative size of the groups, has an ambiguous effect on property rights. These results suggest that ethnicity is politically and economically more salient in numerically polarized societies. Therefore, elites are expected to be more entrenched in polarized societies where they hold their co-ethnics a captive constituency.

The process in which ethnicity prevails over competing socioeconomic and political parameters, particularly class, to determine political allegiance is key to understanding institutional change in ethnically polarized and elite dominated societies. As long as institutional development is conceived as the advance of impersonalized and rule-based interactions, the use of ethnic identity as a basis of organizing collective action poses a challenge to the impersonality aspect of modern institutions. This, in turn, gives the elites an edge in controlling the economic and political spaces using the ‘ethnic card’ as a bargaining chip. However, ethnicity is not a one-dimensional phenomenon that necessarily assumes a political form. Naturally, ethnic identities are defined by language and/or heritage before they may develop a political dimension. Often, the political salience of ethnicity is shaped by early institutions. Therefore a scrutiny of how early institutions influence the role of ethnicity, which in turn affects

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1. Alesina et al (2003) do not find any statistically significant relationship whereas Hodler (2006) asserts that less fractionalized societies will have stronger property rights.
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current institutions through the entrenchment of elites, sheds light on the mechanisms of institutional path-dependence.

The first essay seeks to analyze the impact of the distribution of human capital between political and economic elite groups on the attainment of stable property rights. Simply put, the paper attempts to examine if relatively better-educated political elites promote stable property rights more often than the less educated ones. The presence of stable property rights is narrowly defined as the absence of political predation. A simple model of endogenous property rights is formulated explaining the emergence of a non-predatory state as a function of the distribution of productive human capital among the elites. Productive human capital refers to marketable skills that can be employed outside the bureaucracy. In order to simplify the analysis, the stock and distribution of human capital is kept exogenous. The model employs the assumption of capital-skill complementarity to explain why better educated political elites may find it in their best interest to commit to respect property rights. A non-predatory state emerges, attracting investment to the formal sector, when the human capital share of the political elites is high, but not too high. If the human capital share of the political elites is too high, implying that the economic elites have a low share of human capital, the total gain from formal sector investment per unit of human capital should be high enough to compensate the economic elites to invest in the formal sector. If the human capital of the political elites enhances their predatory capacity in addition to their productive potential, the political elites should offer stronger institutional concessions as their share of human capital increases.

Assuming that there is an informal alternative to the formal sector shielded from predation, better returns in the informal sector (or what could alternatively be considered as a foreign economy) could lure physical and human capital away from the formal sector. This could, in turn, remove the incentives for establishing property rights in the first place. Assuming that the political elites can impose a cost of predation on themselves in an attempt to show their commitment, the present model derives a hybrid regime where partially institutionalized property rights coexist with non-democracy. The theoretical underpinnings behind this last regime type could shed light on many of the fast growing countries in the world today featuring hybrid political and economic institutions. In the extreme case where the political elites have too much human capital return to earn in the formal sector to deny political franchise, intra-elite democracy emerges as a commitment device to ensure the ex-post protection of property rights once investment has occurred. In this context, intra-elite democracy represents the extension of political franchise to the economic elites including control over the tools of predation.
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The theoretical model described above is motivated against the historical backdrop of the evolution of property right institutions in two countries that took different paths after their political and economic elites were split at a critical juncture in their histories. The countries are Malaysia and Zimbabwe. The existence of well educated aristocracy in Malaysia who were ready to take power after independence and claim their share in the capitalist system of production created confidence in the stability of property rights. On the contrary, the demise of the Zimbabwean economy and the obliteration of property right institutions in that country could be partly attributed to the historical inequality between the human capital endowments of the white minority and the black majority. The disparity in schooling has been compounded by the readily available exit options presented to educated white Zimbabweans by South Africa and Britain.

The second essay dwells on the broader empirical relationship between schooling and property right institutions. By controlling for lagged income and taking account of the interaction effect between income and education, the econometric set up tries to tackle the problem of tripartite causality between institutions, income and human capital. The paper also mitigates one of the problems that have pestered the empirical analysis of property rights, i.e. measurement of property rights, by proposing a new composite index built on a widely used set of indicators. In the baseline estimations, I try to document the empirical regularities in the relationship between property rights and education controlling only for rudimentary sources of endogenity (i.e. reverse causality). In latter estimations of the relationship, however, I use standard methods of identification to take care of the endogeneity issue more thoroughly.

As expected, education has a generally positive impact on property rights. But the more interesting results emanate from the non-linearity of the relationship with respect to level of education as well as level of income. A rise in schooling helps countries in the lower and upper strata of average education to improve their property right institutions marginally more than the ones with intermediate education. Although education is found to be statistically more significant than income in most specifications, its effect does crucially depend on the level of income of the country. Unless their incomes increase simultaneously with their stock of human capital, low income countries could have their property right institutions destabilized by educating more of their citizens. It is also shown that moderate levels of human capital inequality do not hurt property rights as long as the average level of education is not too low. Instrumental variable estimation demonstrates that the schooling of the least educated 60 percent population is better identified to measure the impact of human capital on property rights. The dynamic panel estimation of the relationship reveals that it takes some time before an increase in the human capital of the least educated 60 percent population bears a positive impact on property right institutions.
The third essay moves on to explaining factors that may be behind the kind of elite persistence that has influenced the nature of political and economic institutions in most developing countries. Ethnic allegiance is singled out as one such factor. The paper specifically aims to examine why ethnic allegiances persisted as the most dominant medium used by the elites to organize collective action in Kenya, prevailing over alternative forms of mobilization such as class. Kenya is selected for the case study because it features a post-colonial history replete with the effects of elite persistence and ethnic tensions in spite of having a vibrant capitalist economy unlike most other countries in Africa. In line with the intriguing coexistence of political maturity and fragility in Kenya, the oft-destabilizing prominence of ethnic fault lines is contrasted with the trans-ethnic cooperation that has underlain the two peaceful presidential transitions the country has seen before 2013.

The results show that competitive tribalism has persisted in the face of sizable class cleavages because initial inter-group inequalities have undermined the political salience of rising individual inequality. The robust economic growth performance of the first decades of the post-independence era failed to weaken ethnic sentiments because the economic gain accrued to some ethnic groups more than to others. Moreover, the early institutions of the country were designed in such a way that the stability of the ruling coalition would depend on the elites’ ability to use ethnicity as a bargaining chip to secure their share of the pie. Nevertheless, at the events of the two presidential transitions, ethnic allegiances failed to choke trans-ethnic cooperation because some of the most powerful ethnic organizations themselves were fragmented. Faced with political fragmentation and uncertainty, the elites chose to minimize the risk of intra-elite crisis by resorting to the default option of honoring the rule of law. All in all, early institutions and the corresponding distribution of resources have continued to influence current institutions through the strategic use of ethnicity by the elites for mobilizing collective action.

I will close this introductory chapter by recapitulating the common themes that the three essays try to address. The link between human capital and property right institutions is dealt with in essays one and two. The focus of the first essay is confined to the distribution of elite human capital because the emergence of stable property rights is assumed to have more to do with the advent of institutional constraints in the realm of intra-elite interactions than in the broader society. The second essay, given its empirical focus, broadens the domain of human capital to include the education of the general population with both the level and distribution of schooling considered as determinants of property rights. Although elites are not explicitly identified in the second essay - mainly for lack of cross-country data on elites' education - the measure of schooling inequality is believed to capture the disproportionate share of the elites indirectly. The third essay reinstates elites as a unit of analysis by shading light on how
they use exogenous factors such as ethnicity in a politically salient fashion to influence institutional change. The use of single-country historical data in the third essay makes it possible to delve deeper into the long-run relationship between early and current institutions with ethnicity as intervening variable. Ethnic identity is one of the factors that mark a sharp distinction between political and economic groups. Therefore, the assumption of an intra-elite split that is key to the analysis of the first essay finds theoretical and historical foundation in the third essay.

In terms of key results, the first essay establishes that productivity in the formal sector should be high enough for the political elites to be willing to respect property rights. This relationship between relative productivity and property rights recurs in the second essay through the dependence of the link between education and property rights on the level of income. Moreover, in the second essay, high inequality in the distribution of education is found to be less pernicious to property rights than low average education. This finding could be linked to the general result in the first essay showing that elites education is positively related to property rights. The third essay attributes the persistence of elites’ influence in the face of economic growth and increasing human capital investment to inter-ethnic inequality caused by early institutions. Therefore, for virtuous institutional change to happen, the distribution of human and physical endowments such as education should be balanced not only between political and economic elites (as indicated in essay one) but also between various ethnic groups (as inferred in essay three).
References


Institutional change in the long shadow of elites
INTRODUCTION

CHAPTER ONE

Educated Bandits:
Endogenous Property Rights and
Intra-elite Distribution of Human Capital

Biniam Bedasso

Abstract
This paper presents a simple framework of endogenous institutions linking property rights to
the distribution of human capital between political and economic elite groups. A non-predatory
state emerges, attracting investment in to the formal sector, if the human capital share of the
political elites is high, but not too high. If education enhances predatory capacity in addition to
productive potential, the political elites should offer stronger institutional concessions to attract
investment as their share of human capital increases. Given a balanced distribution of human
capital among the elites, property rights could be instituted partially without reforming political
institutions. Brain drain can undermine the transition to stable property rights even when the
political elites are well-educated. Comparative narratives from Malaysia and Zimbabwe are pre-
sented to motivate the theoretical discussion.

Keywords: property rights, human capital distribution, elites, democracy
JEL classification: P16, I25

I. Introduction

With the advent of the modernization hypothesis pioneered by Seymour Lipset (1959,
1960), education has been gaining prominence as one of the major driving forces
behind institutional change. However, there has been little attention given to the link
between education and economic institutions such as property rights. Beginning with
Lipset himself, much of the theoretical argument has been directed toward the role
of education in the creation and consolidation of political institutions. In spite of the
mounting evidence on the relationship between the protection of property rights
and economic development, there is not sufficient connection established between
education and property rights with reasonable theoretical rigor. Most of the explanation of the state of property rights in different societies remains confined to exogenous factors such as legal origin, resource endowment and critical junctures of history. This paper seeks to add to the vein of the formal theory of endogenous institutional change by linking human capital to institutional change. Specifically, the paper attempts to examine the joint impact of the distribution of human capital and the exit options of educated labor on the emergence of stable property rights.

The scope and definition of property rights adopted for this paper is fairly general. The existence of stable property rights is defined as the absence of political predation. The state is not depicted as a benign framer and third-party enforcer of property rights. On the contrary, as an embodiment of the collective interest of the political elites, the state is assumed to be a major player in the game of predation on private production. In the spirit of North et al. (2009), the existence of rule of law among various groups of elites is considered to be a critical milestone for the development of robust institutions in the broader society. Accordingly, the emergence of stable property rights is conceptualized as the establishment of the rule of law as a means of governing the economic relationships between political and economic elites. Moreover, the focus on elites is warranted because, in most societies that have not yet developed stable property rights, productive capital is normally owned by an exclusive class of economic elites.

In pursuing the central theoretical argument more formally, a simple model of endogenous property rights is formulated explaining the emergence of a non-predatory state as a function of the distribution of productive human capital among the elites. Productive human capital refers to marketable skills acquired through education and experience that can be employed outside the bureaucracy. In order to simplify the analysis, the stock and distribution of human capital is kept exogenous. The model employs the assumption of capital-skill complementarity to explain why better educated political elites may find it in their best interest to commit to respect property rights. A non-predatory state emerges, attracting investment to the formal sector, when the human capital share of the political elites is high, but not too high. If the human capital

2. On the link between property rights and economic development, Acemoglu and Robinson (2012) and Ferguson (2012) provide comprehensive historical accounts of how the western world has built its centuries-old prosperity on the institutions of property rights and contract enforcement. Studies such as Knack and Keefer (1995) and Acemoglu et al. (2001) provide econometric evidence.

3. See Levine (2005) for a complete survey of those perspectives. For specific empirical analysis on each of the factors, one may refer to La Porta et al. (1999) for legal origin, Engerman and Sokoloff (1997) for resource endowment and Acemoglu et al. (2001) for critical junctures.

4. North et al. (2009) argue, for most part of recorded human history, the institutions that define the rule of the game and determine the relationship of the state with the rest of the economy are shaped by the interplay between elites.
share of the political elites is too high implying that the economic elites have a low share of human capital, the total gain from formal sector investment per unit of human capital should be high enough to compensate the economic elites to invest in the formal sector. Moreover, at a given distribution of human capital, the extent to which human capital enhances the predatory capacity of the political elites in addition to their productive potential determines the degree of institutional concessions they have to make to attract investment to the formal sector.

Assuming that there is an informal alternative to the formal sector shielded from predation, better returns in the informal sector (or what could alternatively be considered as a foreign economy) could lure physical and human capital away from the formal sector. This could, in turn, remove the incentives for establishing property rights in the first place. Assuming that the political elites can impose a cost of predation on themselves in an attempt to show their commitment, the present model derives a hybrid regime where partially institutionalized property rights coexist with non-democracy. The theoretical underpinnings behind this last regime type could help us understand many of the fast growing countries in the world featuring hybrid political and economic institutions. In the extreme case where the political elites have too much human capital premium to capture in the formal sector to deny political franchise, intra-elite democracy emerges as a commitment device for the ex-post protection of property rights. In this context, intra-elite democracy is used to describe the extension of political franchise to the economic elites including control over the tools of predation.

To situate the theoretical discussion in the appropriate context, some important qualifiers are in order. So as to command a degree of systematic influence that is strong enough to shape durable institutions, the domains of both the political and economic elite groups should extend beyond a few individuals or families. Typically, the elites could be viewed as predefined subsets of ethnic or racial groups or clans that wield substantial political or economic control compared to the rest of the society. The core of the theoretical argument that is pursued in this paper lies in the treatment of the human capital of the elites as a marketable factor of production which is complementary to physical capital in the production process. As in most other aspects of political economy, the politics behind the determination of the institutional structure is influenced more by the distribution than the level of resources. That is why the central focus of the analysis of intra-elite property rights is pinned on the distribution of human capital between the political and economic elites.

This paper offers a new version of the ‘stationary bandits’ hypothesis by characterizing the political elites as a group that could benefit directly from economic security in the
market through better returns on their own human capital.\textsuperscript{5} It might not be straightforward to imagine political elites who are at the same time employed in productive activities. One way to approach this issue is to adopt a dynastic or overlapping-generations conceptualization of political elites.\textsuperscript{6} This conceptualization differentiates between the ‘parents’ with political power and the ‘offspring’ with productive human capital. As far as utility is transferable between parents and offspring, the parent political elites decide to either predate or institute secure property rights with due consideration for the potential trade-off in terms of human capital returns for the children in case physical capital flees the formal sector. Another way to conceptualize the productive use of the human capital of the political elites is to adopt a two-period timeline according to which the political elites hold political office in the first period and retire to assume productive employment in the second. Given their discount rate falls in a reasonable range, the political elites align their interest as productive employees at a later stage of their life with their decision to establish (or not to establish) property rights institutions in their youthful years. Li (1998) credits the Chinese policy of setting term-limits on bureaucratic tenures and allowing senior bureaucrats to join business firms after retirement to the improvement in bureaucratic efficiency in the 1990s.

The theoretical discussion in this paper sheds light on the link between potential emigration of human capital, which is commonly referred to as brain drain, and the likelihood of stable property rights being instituted by the political elites. In a globalized world where capital and labor become more mobile with economic integration, the incentives for building robust domestic institutions in a certain jurisdiction are hardly insulated from the influence of external alternatives. In this regard, the line of argument advanced in this paper relates to the enticing effect of external returns on physical and human capital that may be undermining the development of property rights institutions domestically.

\textsuperscript{5} In his famous hypothesis about ‘stationary bandits’, Mancur Olson (1993) distinguishes between two major types of non-democracies which could be described as ‘roving bandits’ (i.e. anarchy) and ‘stationary bandits’ (i.e. tyranny). He argues that a stationary bandit form of governance could allow for a certain level of economic security because the dictator expects to stick around for long enough to share the benefits of the economic success through taxes. “Under anarchy, uncoordinated competitive theft by ‘roving bandits’ destroys the incentive to invest and produce, leaving little for either the population or the bandits. Both can be better off if a bandit sets himself up as a dictator – a ‘stationary bandit’ who monopolizes and rationalizes theft in the form of taxes” pp. 567

\textsuperscript{6} The dynastic or overlapping-generations conceptualizations are invoked here to situate the theoretical discussion in the forthcoming sections in the right context. However, the model in section three maintains a simple single-period horizon populated by a group of elites who could be thought to be making their decisions with the market returns on the education of their children directly incorporated in their pay-off functions.
Chapter One – Educated Bandits

The idea that political elites could be behind institutional change which eventually undermines their own power is not new to the literature. The strand of theoretical propositions pioneered by North and Thomas (1973) and further popularized by the roving vs. stationary bandit characterization of Olson (1993) espouses that political and economic order will be created by revenue interested political elites. As mentioned above, the major departure in this paper from that vein of literature lies in its focus on market returns generated by the elites themselves as the motivating factor for institutional change.

A handful of theoretical models have tried to factor in the role of education in determining political equilibrium. One of the earliest of such attempts comes from Perotti (1993) in a model where he assumes that education influences political participation and the oligarchic hegemony would decide on investing in public education based on ex-ante expectation of potential changes in the political landscape. Bourguignon and Verdier (2000) presented an extended version of Perotti’s model. Glaeser et al (2008) model democracy as a function of education with the assumption that schooling raises the tendency for civic engagement and political participation. However, Campante and Chor (2008) scrutinize the seemingly well accepted role of schooling as a driver of political participation by conditioning it on factor endowment. Eicher et al (2009) try to disentangle the endogenous relationship between institutional quality and human capital to finally conclude that other socioeconomic fundamentals such as inequality are responsible for both.

The game-theoretic framework in the formal model in the present paper is closely related to the model of democratization presented in Acemoglu and Robinson (2006). The significance of capital-skill complementarities in influencing the incentives of various elite groups has been exploited for political economy analysis in Galore and Moav (2006). The joint evolution of democracy and property rights is inspired by Gradestein (2007). The closest that comes to the present paper in explaining the redistributive tendencies of an elite-dominated society in terms of the complementarities or substitutability of the factors of production controlled by the elites or other social groups is Bourguignon and Verdier (2012). However, that paper falls short of attaining the specific focus on property rights and human capital, which is highlighted as the central contribution of the present paper.

The rest of the paper is organized in three sections. The next section sets the context with historical accounts from two country case studies. The respective dynamics in the property right institutions of Malaysia and Zimbabwe are assessed with reference to the human capital distribution among the elites and the viability of the exit options available for educated labor at specific critical junctures. Section three provides a theoretical framework that may be applied to explain such narratives as the ones presented

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in section two using a simple model of endogenous property rights. Section four concludes.

II. The tale of property rights in two countries: comparative narratives

The histories of most societies have shown that the distinction between political and economic elites could not be more vivid than at historical junctures following the occurrence of profound societal events such as decolonization or revolutions. In many cases, the distinction becomes blurred after social contracts are renegotiated between those who are in control of the state and those who possess material resources. The split between political and economic elites is rather pronounced in cases where socio-economic patterns preceding the transformation are stacked in such a way that a certain ethnic or racial group will emerge as a ruling class while another dominates the economy.

On face value, most populist events such as revolutions could be depicted as truly broad-based and non-elitist. However, as political theorists have repeatedly asserted, such populist transformations are presided by some sort of shadow `elites-to-be'. The adjustment process to the new political-economy equilibrium is often governed by what Robert Michels dubs `the iron law of oligarchy':

“Even when the discontent of the masses culminates in a successful attempt to deprive the bourgeoisie of power, this is ...effected only in appearance; always and necessarily there springs from the masses a new organized minority which raises itself to the rank of a governing class.” Michels (1915, pp. 354)

The same is true in most of the seemingly less dramatic transformations such as eventual decolonization that have shaped the political economy of some of today's developing countries. The existence of institutional path-dependence is intertwined with persistence in elites' interests resulting in, at best, the emergence of new elites with old interests (Robinson, 2012).

The following subsections provide historical accounts of the evolution of property rights in Malaysia and Zimbabwe. Both countries are characterized by the domination of political and economic elites that are strictly aligned along ethnic or racial lines. Both of them were colonized by the British; they demonstrated relatively robust pre-independence economic performance, and maintained comparatively stable first
decade after independence. Regardless of the similarities in their institutional and economic trajectories only a few decades earlier, the two countries ended up as the polar cases of economic success and failure by the dawn of the 21st century.

a. **Malaysia: institutional stability guarded by semi-democratic elites**

The Malay of Malaysia (commonly referred to as ‘Bumiputra’, together with other – smaller – indigenous tribes) constitute the majority of the Malaysian society; whereas the minority ethnic Chinese, who accounted for 38.4 percent of the population in 1947, have wielded far higher economic power for more than a century. Even though the majority of the Malay population remained impoverished throughout the colonial period, the traditional ruling class was able to maintain various Sultanates across the country. Those traditional institutions were exploited by the British to keep the social order intact. But, at the same time, they served as cocoons for an aristocratic class that would emerge as political elites at independence.

The ethnic Chinese, who were immigrants of recent generations, thrived in commerce by taking advantage of their close-knit personal networks. Differences in cultural orientation toward capital accumulation were partly responsible. But organizationally, Malays lack institutions that could mobilize capital and pool economic resources effectively (Jesudason, 1989, pp. 36). Therefore, long before independence, the Malaysian society had already taken shape as one that would be dominated by exclusive groups of political and economic elites.

The traditional ruling class of the Malay society was not only privileged to maintain its place in the social hierarchy; the British also groomed the children of the aristocratic elites for bureaucratic responsibilities in the Malay Administrative Service (created in 1910). That is the main reason why the elite college of Kuala Kangsar was established in 1905 to provide English-based training for the sons of the Malay upper class (Drabble (2000), Jesudason (1989), Higgins (1982)). However, except from the targeted and elitist provision of educational opportunities to Malay aristocrats, the overall expansion of education among the native people, particularly in rural areas where the majority resided, remained abysmal. The Chinese, on the other hand, being by far the majority of the urban population, had a great advantage in the numbers able to attend the more advanced urban schools (Taib and Ismail, 1982).

The former colony of Malaya gained independence in 1957, and it was united with two other territories to form the current nation of Malaysia. The post-independence political economy history of Malaysia can be summarized in two major epochs. The pre-1969 period could be considered as the time of transition and consolidation of
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the pre-independence Malay elites. During that period, foreign - particularly British - capital continued to dominate the main economic sectors in the country (Gomez, 1999). Moreover, the grand alliance of Malay and Chinese parties formed to take over the country from the British enabled a political bargain for Chinese capitalists to preserve and expand their interest in the first decade after independence (Jomo, 1986). In spite of the stability and commendable economic performance in the economy, the growing inequality in the new independent country in general, and among the Malay in particular, fomented substantial frustration that eventually led up to the 1969 riots.

In the aftermath of the riots and after subsequent political reshuffling, the state assumed a more interventionist, and sometimes authoritarian, role in different aspects of the economy. The government actively sought increased Malay representation in the capitalist economy in terms of employment and ownership. Expectedly, those policies were met with resistance from the Chinese investors. Although some of the larger Chinese firms were able to expand rapidly because of the high growth rates of the 1970s and early 1980s, they chose safe and easy areas of expansion, generally staying away from manufacturing (Jesudason, 1989, pp. 128).

The Malaysian political system has remained semi-democratic ever since, with demonstrable dominance of a single party hegemony. But the state has always been cautious in the way it deals with private capital. In the face of strained ethnic and wealth relations that have defined the nation’s history, no instance of outright expropriation and systematic predation has occurred in Malaysia. Rather, the country emerged as one of the fastest growing economies of the world in late 20th century.

b. Zimbabwe: property rights collapsing under the weight of brain drain

Compared to Malaysia’s, Zimbabwe has a bitter colonial history, mainly because it was a settler colony ruled by a very small minority. Although they made up only 3.8 percent of the population, at independence the modern sector of the economy was almost entirely owned and managed by the whites (Jenkins and Knight, 2002). Legislations such as the Land Apportionment Act of 1930, which had legalized the balkanization of the country into white and black areas, contributed a lot to the systematic discrimination in the economic system against indigenous blacks. The settler state contributed to the creation and entrenchment of minority economic elites by facilitating and directly participating in the accumulation of capital both inside the country and abroad (Cokorinos, 1984, pp. 12). The marginalization of the black majority was not limited to capital accumulation; it was rather all rounded to the extent that blacks and colored people were excluded by the 1931 act from entering the established posts in
the civil service (Murapa, 1984). Hence, unlike other settler colonies in Africa such as Kenya, the political economy structure of South Rhodesia (the colonial name of Zimbabwe) did not allow even for a minimal level of development of a would-be political elite class among the black majority.

The picture in terms of educational equity in pre-independence Zimbabwe was not rosy either. Before independence educational opportunities for black children were severely limited, and just as much in qualitative as in quantitative terms. The latter were bad enough: only 42 percent of children of primary school age were at school in 1979, and less than 20 percent of the primary school leavers were able to find secondary places, and even then to be faced with high exclusion rates after two and four years (Stoneman and Cliffe, 1989, pp. 168). The modern economic sector was structured in such a way that it would allow the absorption of only a few selected graduates. Apprenticeship opportunities were virtually inexistent for black students, adding to their disadvantage in acquiring marketable skills.

By the time Zimbabwe gained independence in 1980, the prospect of harmonious relationship between the new political elites and the white economic elites was not good. Independence was not gained in the same way as in other African countries, either through negotiating peaceful handover with the colonial power or by winning outright victory in the war. The Lancaster House Agreement, negotiated by the British government on behalf of the settlers, instituted the protection of private ownership of property particularly in land. The transition period of the first decade of independence was marked by the consolidation of political power in the hands of the Zimbabwe African National Union (ZANU-PF) elites and the increasing retreat of the white minority into the business sector.

The demise of the long-term stability of the Zimbabwean economy began silently as the human capital base of the economy continued to be eroded through net emigration of the white population beginning in mid-70s. The 1969 census showed that 41 percent of whites in Rhodesia were born there; 23 percent were born in the UK; and 22 percent in South Africa. This meant that around half of the white population had right of residence elsewhere, and South Africa at least was sympathetic to applications for immigration to Rhodesian-born whites (Jenkins and Knight, 2002, pp. 27). Therefore, even if the Lancaster House Agreement devised an incentive scheme intended to forestall mass exodus, the slow and persistent emigration had already started depriving Zimbabwe of the expertise it needed as a new country. Although the Zimbabwean government invested aggressively in delivering education to the black population, and has achieved a commendable milestone in educating a substantial portion of the population, it could not reverse the damage inflicted through the hemorrhage of the accumulated experience. On top of that, the educational expansion of the 1980s lost steam as
the rate of unemployment among the educated rose. Moreover, the heavy expenditure put a strain on the fiscal balance, and the quality of education became compromised due to ambitious expansion (Shizha (2006), Stoneman and Cliffe (1989), Jenkins and Knight (2002)). Brain drain from Zimbabwe is not a white-only phenomenon, however. There has been an equally astounding level of exodus of black Zimbabweans particularly to South Africa (Crush and Tevera, 2010). This trend has dramatically intensified by the fall of apartheid and the establishment of a black majority government in South Africa.

In comparison to the brain drain, capital flight was more subdued in the first decade after independence. This is partly because of the de jure protection provided by the Lancaster House Constitution as well as the protectionist policies that were maintained by the black elites in favor of the manufacturing sector. But the second and indirect reason discouraging capital flight was the foreign exchange control imposed by the government. One of the first measures prescribed by the International Monetary Fund that was implemented by the Zimbabwe government as part of the Economic Structural Adjustment Program (ESAP) in the early 1990s was foreign exchange liberalization. This might have led to expedited outflow of capital preceded by the decade long brain drain of the white population.

The de facto erosion of the property rights institutions in Zimbabwe has been in the making for a long period of time with the deep rooted mistrust between the minority economic elites and the majority black population. Even if the black petite bourgeoisie benefited substantially from the dependent capitalist system inherited from colonial times, socialist tendencies lingered as the overtone of the general policy directions of the post-independence regime. Although the government insisted that it would welcome foreign investment, it failed to credibly signal its commitment for the protection of property rights. For instance, it consistently refused to sign the United States Overseas Private Investment Corporation agreement, which requires the provision of a guarantee not to nationalize without compensation (Jenkins and Knight, 2002). The political elites demonstrated increasing tendencies of bureaucratic predation and political profiteering in the background of a simmering popular discontent against delayed land redistribution. Judged from the point of view of the political economy history of the nation, the land seizures of the late 1990s and early 2000s, which essentially triggered the economic crisis that obliterated Zimbabwe, were the logical culmination of a long-winded institutional deterioration.
c. Summary of narratives

If there is one defining characteristics that could differentiate the Malay political elites of Malaysia from the black political elites of Zimbabwe, it is the fact that they were comparatively as well educated and productively experienced at independence as the group with economic influence in their society. This, in turn, has generated a commitment to maintain a modern economy that employs their human capital more effectively. Owing to the commitment that the political elites showed toward encouraging capital investment in the formal sector, Malaysia maintained stable property rights whereas Zimbabwe ended up with a predatory state. Moreover, in Zimbabwe’s case, there was viable opportunity for physical and human capital to flee the country, further eroding the incentive of the political elites to commit to stable property rights. On the contrary, in Malaysia, even if the most recent first-generation Chinese settlers had sought to return to China when the 1969 riots threatened stability, they would have been daunted by the alternative of a Maoist China.

The bitter way in which independence was gained in Zimbabwe could be considered as the immediate culprit for the souring of the relationship between the political and economic elites at a later stage. But, backing up one step farther to scrutinize the strategic considerations of the elites, it becomes clear that the white elites fought so hard against the prospect of black majority rule because they wanted to stave off extreme redistribution. They had anticipated that the new political elites would tend to predate since the latter had little capital sunk in the formal sector including productive human capital.

The formal model presented in the next section provides for the mechanism in which the distribution of human capital among the elites could lead to different outcomes in property rights institutions such as the ones in Malaysia and Zimbabwe. It also ties the effects of the exit options for physical and human capital to the influence of the distribution of human capital.

III. A simple model of intra-elite property rights

a. Preliminaries

I formulate a simple, static, extensive form game played between the political and economic elites with fully transferable utility among the respective domain of each group. The citizens (or the working class) are left out of the game because the overall
framework focuses on intra-elite rule of law. The political elites constitute a proportion \( \alpha \) of the elite population. The economic elites are assumed to be more populous than the political elites, i.e. \( \alpha < 1/2 \). The economy is a two-factor production economy. There are \( K \) units of physical capital in the economy entirely owned by the economic elites. I assume that there is no direct cost of capital for the economic elites other than the opportunity cost of investing in one sector instead of the other. There are \( H \) units of human capital shared among political and economic elites according to \( \delta \) and \( 1-\delta \) proportions, respectively.

There are two sectors in the economy. One is the formal sector where physical capital is combined with human capital according to the following constant returns to scale (CRS) production function,

\[
Y = F(K, H),
\]

which translates into the following function of output per unit of human capital;

\[
y = f(k), \text{ where } k \text{ is the physical capital to human capital ratio.}
\]

\( F_{KH} > 0 \), implying physical capital and human capital are complementary.

The wage rate per unit of human capital in the formal sector is \( \hat{w} \). After paying for the cost of human capital, the economic elites retain the residual production as their return. This particular characteristic, as well as the no cost of capital assumption laid out above, emanates from the very nature of an elitist society which is normally associated with the prevalence of imperfect capital markets and lack of distinction between ‘ownership’ and ‘control’. The investment of the economic elites in the formal sector is exposed to predation by the political elites. Suppose the political elite can potentially predate at a rate \( \hat{\tau} \), which is a function of their human capital. Therefore, the political elites face a dichotomous choice between refraining from predation and predating at a fixed rate determined by the level of their human capital.

\[
\hat{\tau} \in \{0, \tau(H)\} \equiv \{0, \tau(\delta H)\} \equiv \{0, \tau_{\delta}\}; \quad \tau_{\delta} > 0, \quad \tau' > 0
\]

The first equivalency is underlain by the fact that predation can be committed only by the political elites while the second equivalency follows from the assumption that there is a fixed stock of human capital in the economy. There is positive predation even at zero human capital, and predation is increasing in human capital. In the current model, the use of human capital is assumed to be ‘non-rival’. This means the political elites will be employing their human capital for productive purposes in the market at the same time as they are using it to enhance their predation potential.

The second sector in the economy is the informal sector where physical capital is employed separately from human capital. In the informal sector aggregate physical capital returns \( \chi_{K} \), whereas a unit of human capital earns \( \check{w} \). The investment in the informal sector is safe from the potential predation of the political elites. Physical
capital cannot be divided between the two sectors. The size of resource rent in the economy is denoted by $R$. Resource rent is always captured by the group with political power.

The timing of events within the stage game is as follows:
- The political elites decide whether to promise property rights or to maintain the status-quo. In promising property rights, the political elites have the options of loosely instituting it (denoted by NP) or irreversibly securing it by sharing political power with the economic elites (denoted by D). The status-quo is denoted by N.
- The economic elites decide to invest either in the formal sector or in the informal sector. If political franchise has been extended, the stage game ends here. But if political franchise has not been extended, the stage game continues to the next phase.
- The political elites decide to predate or not to predate.

The objective of the political elites in this game is maximizing the total payoff that they could get in terms of market returns on their human capital, spoils from potential predation and natural resource rents. By virtue of their political power, the political elites move first and select the institutions that govern their relationship with the economic elites in a way that maximizes their payoff. Their default strategy is to maintain the status-quo of no property rights and no political franchise. In this case, if the economic elites (denoted by EE) decide to invest in the formal sector and the political elites (denoted by PE) predate, the payoffs to the two groups will be as follow,

\[ V^{PE}(N, I = 1, \hat{\tau} = \tau_\delta) = \tau_\delta f(k)H + \delta wH + R \]

\[ V^{EE}(N, I = 1, \hat{\tau} = \tau_\delta) = f(k)H - \delta wH - \tau_\delta f(k) \]  \hspace{1cm} (1)

In the presence of formal sector investment, the decision not to predate will be followed by the following set of payoffs,

\[ V^{PE}(N, I = 1, \hat{\tau} = 0) = \delta wH + R \]  \hspace{1cm} (2)

\[ V^{EE}(N, I = 1, \hat{\tau} = 0) = f(k)H - \delta wH \]  \hspace{1cm} (3)

If the economic elites decide to avoid the formal sector and invest their physical capital in the informal sector, owing to complementarity, human capital also follows and ends up in the informal sector. This will result in the following payoffs,

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7. This characteristic can be drawn from a Leontief-type production function in the formal sector with perfect complementarity.
### The choice of partial property rights within non-democracy

The second option, next to maintaining the status-quo, faced by the political elites is instituting partial property rights that may be credible enough to induce investment in the formal sector. What I mean by partially institutionalized property rights is the installation of institutional structures that will make predation difficult, but not impossible, for the political elites. In the current model, I represent this feature by the introduction of a monitoring cost of predation, $C$, which is assumed to have a dichotomous distribution of high and low. The monitoring cost is assumed to have two components. One is deterministic and a function of the human capital share of the economic elites, while the other is stochastic and determined by random disturbances happening after investment is made.\(^8\)

$$
C = C(H, \nu) \equiv C((1 - \delta)H, \nu) \equiv C_{((1 - \delta), \nu), \nu} \in \{C^L, C^H\},
$$

where $\nu$ represents the random factor, and the superscripts $L$ and $H$ represent low and high values of the monitoring cost, respectively. Even though the actual value of the monitoring cost is revealed after investment has been made, both the political and economic elites have common knowledge of the probability distribution of the cost beforehand. Because the actual value of the cost is known by the time the predation decision is made, the political elites will predate only if the monitoring cost is low. If the economic elites decide to invest in the formal sector and the political elites predate, the payoff to the latter will be as follows,

$$
\mathcal{V}^{PE}(NP, I = 1, \hat{\tau}(p) = \tau_\delta) = [\tau_\delta f(k)H - C^L] + \delta wH + R
$$

All the remaining payoffs resulting from partial institutionalization are the same as in equations (1) - (5) because the partial institutionalization of property rights affects actual payoffs only through the realization of the cost of monitoring.

\(^8\) Although the monitoring cost is faced by the political elites, the level of the cost depends on how well organized the economic elites are to get property rights enforced or hide their outputs effectively. This is supposed to depend on how well educated the economic elites are.

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Institutional change in the long shadow of elites
The choice of intra-elite democracy within a dominant coalition

Partial (or intra-elite) democratization comes as the last option to induce investment in the formal sector. If the political elites decide to extend political franchise to the economic elites, their pay-off will solely depend on whether the economic elites find it profitable to invest in the formal sector given the property rights guaranteed by partial democratization.9 Moreover, a political process will be applied to determine the allocation of resource rents. The efficiency of the political process is parameterized by $\theta$.

Accordingly, after democratization and in the case of formal sector investment by the economic elites, the political elites receive the following pay-off,

$$V^{PE}(D, I = 1) = \delta wH + \alpha R^\theta$$

The corresponding pay-off to the economic elites will be,

$$V^{EE}(D, I = 1) = f(k)H - \delta wH + (1 - \alpha)R^\theta$$

If the economic elites decide to invest in the informal sector, physical capital will pay back the lump sum informal sector rate of return. Hence, the returns to the two elite groups will be,

$$V^{PE}(D, I = 0) = \delta \tilde{w}H + \alpha R^\theta$$

$$V^{EE}(D, I = 0) = \chi_k + (1 - \delta)\tilde{w}H + (1 - \alpha)R^\theta$$

In formally summarizing the above game, the set of actions taken by the political elites is denoted by $\sigma^{PE} = \{\varphi, \phi, \tau(.)\}$. The political elites decide whether to extend political franchise $\phi \in \{0,1\}$, where $\phi = 1$ indicates partial democracy has been created. The political elites also determine jointly with the decision to democratize whether to promise property rights to the economic elites $\phi \in \{0,1\}$, where $\phi = 1$ represents that property rights have been promised. Toward the end of the stage game, the political elites decide whether to predate on the investment of the economic elites. This decision depends on whether partial democracy is not created, whether property rights are promised and the cost of overriding the partial institutions born out of the promise is low enough, $C \in \{C^L, C^H\}$, and whether the economic elites have actually invested in the formal sector, $I \in \{0,1\}$. Therefore, the predation decision by the political elites is represented as, $\tau: \{0,1\} \times \{0,1\} \times \{0,1\} \times \{C^L, C^H\} \rightarrow \{0,1\}$. The set of actions taken by the economic elites is denoted by $\sigma^{EE} = \{I(.)\} \in \{0,1\}$. The investment decision is

9. Since the economic elites are assumed to be more populous, the possibility of redistribution under democracy driven by majority interest is ruled out.
taken after observing the regime choice by the political elites, \( \{ \varphi, \phi \} \), and the probability distribution of the cost of overriding the partially instituted property rights, \( p(C^H) \in [0,1] \). Hence, \( I : \{0,1\} \times \{0,1\} \times [0,1] \rightarrow \{0,1\} \).

b. **Equilibrium analysis**

The solution concept used to solve the present game is sub-game prefect equilibrium. The first thing that the political elites consider in making their decision over institutional choice is their preference for either of the two sectors. Since all their economic assets are held in the form of human capital, their preference will be a function of the inter-sectoral differentials in returns to human capital plus any spoils of potential predation in the formal sector. They strictly prefer investment to happen in the formal sector if their own human capital brings premium returns in that particular sector,

\[
\delta(w - \hat{\omega}) \geq 0
\]  

(6)

If the above condition fails to hold the political elites will be interested in keeping their skills in the formal sector only as long as their predation makes up for the loss in human capital returns. That is,

\[
|\delta(w - \hat{\omega})| \leq \tau_{\delta} f(k)
\]  

(7)

Let the above condition in (7) be named the *predation compensation threshold*.

Even when they have strict preference for the formal sector, i.e. the condition in (6) holds, the best strategy for the political elites would be not to extend any political franchise, not to promise property rights and to predate. However, the economic elites always reserve their option to exit the formal sector. Therefore, the above strategy profile materializes for the political elites only if the exit constraint does not hold. The exit constraint is defined by the preference of the economic elites for channeling their investment to the informal sector whenever they expect predation to happen. The exit constraint is binding if \( V^{EE}(N, I = 0) > V^{EE}(N, I = 1, \hat{\tau} = \tau_{\delta}) \), or

\[
\delta(w - \hat{\omega}) > [(1 - \tau_{\delta}) f(k) - \hat{\omega}] - \frac{\chi_{K}}{H}
\]  

(8)

The inequality in (8) shows that as far as the economic elites do not get sufficient share of the formal sector premium on returns to human capital, they will readily exit the formal sector and invest in the alternative informal sector. From this point forward, I use the political elites’ share of the formal sector premium on returns to human capital \( = \delta (w - \hat{\omega}) \) as the critical threshold variable determining the existence of different equilibrium regimes.
In the presence of a threat by the economic elites to abandon the formal sector in anticipation of predation, the question remains how will the political elites react to the prospect of exit? Because the political elites move last after investment is made by the economic elites, as far as a one shot game is concerned, they will always predate. Therefore, in a one shot game, no investment will occur in the formal sector as long as the constraint in (8) holds and there is no formal mechanism to ‘tie the hands of the political elites’ from predating. This is bound to happen regardless of how much the political elites themselves want formal sector investment to occur for their human capital advantage. This is a variant of the classical ‘commitment problem’.

But there are cases in which the economic elites always prefer to invest in the informal sector for the simple reason of higher returns in that particular sector even when there is no scare of predation in the formal sector (i.e. $V^{EE}(N, I = 0) > V^{EE}(N, I = 1, \tau = 0)$). Let the break-even condition for investing in the formal sector be represented by the following inequality which I call the formal sector profitability threshold,

$$\delta(w - \hat{w}) \leq [f(k) - \hat{w}] - \frac{\hat{W}_k}{H} \tag{9}$$

The formal sector profitability threshold will not be reached when the share of the formal sector premium on human capital that is accruing to the economic elites is too low. It is in an effort to solve their commitment problem and only if (9) holds that the political elites come up with partially institutionalized promises that essentially serve as a commitment device or to ‘tie their own hands’. I have already described in the previous subsection that this aspect is epitomized by a cost of monitoring. This means the political elites make predation costly for themselves ex-ante. Two of the most common examples of such strategy could be facilitating for strong commercial councils or establishing anti-corruption commissions. Another example which is rather unconventional but conspicuously straightforward in preventing predation is the Chinese reform measure that allows business people to hold anonymous bank accounts (Qian, 2003).

A crucial aspect of the formalized ‘promises’ against predation is that they are only partially institutionalized. In other words, $C$ can be revealed to have taken high or low values depending on contemporaneous factors such as international market conditions or the collective action of the economic elites. Both groups have common knowledge of the following probability distribution;

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10. Most of the time, partially institutionalized regimes renege on their promises to respect property rights when they face pressure from their cliental network for redistribution. The cliental network on which the political elites depend to maintain their power could be thought of as consisting of the working class that is not formally incorporated in the model. The pressure from the working class, caused for instance by some...
The stochastic distribution in (10) signifies that even in the presence of partially institutionalized property rights the political elites will predate in $1-p$ of the times. $^{11}$ Accordingly, the partial institutionalization of property rights by way of introducing a monitoring cost of predation can stop exit if the economic elites find investing in the formal sector, after incorporating their prior knowledge of the distribution of $C$, at least as profitable as the informal sector (i.e. $\rho(V_{EE}(NP, I = 1, \tau(\rho) = 0) + (1 - \rho)(V_{EE}(NP, I = 1, \tau(\rho) = \tau_0))$. This condition is captured by the following inequality which I call the predation uncertainty tolerance threshold,

$$\delta(W - \hat{w}) \leq [(1 - (1 - p)\tau_0) f(k) - \hat{w}] - \frac{\chi_k}{H} \quad (11)$$

**Proposition 1.** The political elites will promise to partially institutionalize property rights if they have a strict preference for the formal sector, if the exit constraint is binding, and if the predation uncertainty tolerance threshold is attained. Whether predation happens or not is determined by the ex-post realization of the monitoring cost of predation.

In Malaysia, the loose grand-coalition created between Malay and ethnic-Chinese politicians immediately after independence was intended as a commitment device that would create a cost of monitoring. However, the tension that had kept building among the Malays themselves with the rising inequality reduced the relative value of the monitoring cost by increasing the potential cost the political elites might have to incur if they had not acted to redistribute. This caused a momentary, albeit mild, break down of the partially institutionalized property rights after the 1969 riots, driving Chinese capital away from manufacturing. However, the enforcement of property rights was restored after growth picked up in the 1980s.

It is only when the concession to partially institutionalize property right falls short of stopping exit from the formal sector that the political elites will be forced to consider the option of changing political institutions as a means to guarantee desirable economic institutions. So far I have maintained that whenever (6) is true, implying there is a formal exogenous shift in relative prices, could reduce the monitoring cost of predation by simply increasing the number of eyes watching over the output of the economic elites.

$^{11}$ This result would be different if I employed a repeated game framework with trigger strategy to analyze the predation problem. But I keep the one-shot game framework because it is a simple intuitive framework to characterize the baseline scenario in partially enforced property rights regimes.

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sector premium on human capital, the political elites will have incentive to induce investment in the formal sector. But when they have to extend democratic franchise to the economic elites, the resulting change in political institutions alters the power structure and therefore the structure of their payoffs. To begin with, they no longer keep the resource rent for themselves. As long as political franchise is extended, the rent should be shared among the new coalition of ruling elites consisting of the political and economic elites. On top of that, because the economic elites, with their own objective function, will now take part in deciding the allocation of the resource rent to various uses, there will be a political process with an efficiency parameter $0 < \theta < 1$. Therefore in order to concede political power, the political elites should prefer the potentially lower returns of democratization, $V^{PE}(D, I = 1)$, to the default option of exit under non-democracy, $V^{PE}(N, I = 0)$. This means, in addition to (6), the following condition must hold in order for the political elites to establish intra-elite democracy,

$$\delta(w - \hat{w}) \geq \frac{R - \alpha R^\theta}{H}$$

(12)

Let the condition in (12) be named the resource-rent intensity threshold.

**Proposition 2.** The political elites will extend partial democracy to the economic elites and irreversibly secure property rights if they have strict preference for the formal sector, if both the formal sector profitability and the resource-rent intensity thresholds are attained, and if the predation uncertainty tolerance threshold is not reached.

In determining whether the strategic actions of the political elites in a given country are defined by proposition 1 or proposition 2, the interpretation of the random factor that influences the probability distribution of the monitoring cost is essential. If the probability in which the monitoring cost will be high is positively correlated with economic growth, for a given range of human capital distribution between the political and economic elites, high-growth countries might remain in a partial property rights trap. In a way, the high growth periods of the 1980s and 1990s might have contributed to the semi-authoritarian orientation of Malaysia’s political elites by ensuring just-enough protection to the economic elites in the form of partially institutionalized property rights.

The above pieces of the analysis of the game, altogether, lead to a single equilibrium defined by different configurations of parameters. Corollary 1 summarize the characteristics of the resultant equilibrium. By way of providing a visual representation of the configuration of constraints, Figure 1 depicts the parameter space over which the equilibrium described in corollary 1 may hold.
The above extensive form game has a sub game perfect equilibrium such that the following outcomes are possible depending on the specific configuration of different parameters:

- **Predation with no property rights institutions**: if the exit constraint is not binding and the political elites can gain net benefit out of predation (i.e. (7) holds), the economic elites will always invest in the formal sector and the political elites always predate at the fixed rate;

- **Formal sector exit**: if the formal sector profitability threshold is not attained or if the informal sector offers strictly higher human capital returns to the political elites (i.e. (7) does not hold), or if both the predation uncertainty tolerance and resource-rent intensity thresholds are not attained, the economic elites channel their investment to the informal sector and all the human capital in the economy will be employed in the informal sector;

- **Predation under partial property rights**: if the political elites have strict preference for the formal sector and the economic elites can credibly threaten to exit the formal sector at the same time as the predation uncertainty tolerance threshold is reached, the partially institutionalized promises to respect property rights will induce investment in the formal sector. However, the political elites predate at the fixed rate as long as the cost of predation turns out to be low;

- **Enforcement of partial property rights**: if the political elites have strict preference for the formal sector and the economic elites can credibly threaten to exit the formal sector at the same time as the predation uncertainty tolerance threshold is reached, the partially institutionalized promises to respect property rights will induce investment in the formal sector. As long as the cost of predation turns out to be high, property rights will be enforced;

- **Partial (intra-elite) democracy**: whenever the promise of partial property rights is not credible enough to keep physical capital in the formal sector and the resource rent is low enough to be shared with the economic elites (i.e. the resource-rent intensity threshold is attained), the political elites institute intra-elite democracy and irreversibly secure property rights.

**Discussion of results**

The comparative statics of the above model are fairly straightforward. Most of them can be deduced from simple inspection of the parameter configurations.

As summarized in corollary 1, whenever the net return per unit of human capital gained by the political elites from the formalization of the economy is lower than the average wealth formalization adds net of potential predation, there will be no property rights institutions in equilibrium. As the political elites’ share of the gain on human
capital returns increases, they will be ready to make several concessions to the extent of sharing political power as long as the inefficiency of the political process and the amount of resource rents are low enough. Nevertheless, the concessions of institutional reform will succeed in encouraging investment in the formal sector only so much as the productivity gain due to formalization is high enough to offset what the economic elites may expect to earn on their physical capital in the informal sector. The economic elites will have a bigger share of the productivity premium when they have a bigger share of the total human capital.

The political elites' share of human capital premium can increase due to three reasons. The first case is when the share of the total human capital stock possessed by the political elites (i.e. $\delta$) rises for a given level of formal sector return differential in human capital (i.e. $(w - w')$). The second case is when the formal sector return differential in human capital increases for a given share of the stock of human capital owned by the political elites. The third possibility is when both components increase simultaneously.

![Parameter space and possible equilibrium configurations](image)

Fig. 1. **Parameter space and possible equilibrium configurations**

The rise in $\delta$, *ceteris paribus*, will improve the likelihood of establishing property rights until the gain in human capital returns by the political elites outstrips the total gain.
to the economy from formalization. The later happens because, as $\delta$ increases to the bound, the economic elites may lose from formalization in absolute terms as long as their disadvantage on the human capital side is not compensated by sufficiently large returns on their physical capital in the formal sector. If most of the output in the domestic economy is going to be paid out to the political elites as remuneration for their human capital, the economic elites might as well be better off depositing their money in a foreign bank account.

So far as property rights are not irreversibly secured through political franchise, the rise in $\delta$ also entails a hike in the predation potential of the political elites. This means an increase in $\delta$ affects the predation compensation threshold, the exit constraint, and the predation uncertainty tolerance threshold. The effect of a rise in $\delta$ and the resultant boost it brings to the predatory capacity of the political elites is reflected in equilibrium through the reaction it triggers by the economic elites. Therefore, one needs to look at how a rise in $\delta$ shifts the aforementioned constraints to understand the potential implications on feasible property rights regimes. The right-hand sides of both the predation compensation threshold in (7) and the exit constraint in (8) decrease by $-\tau_{\delta} f(k)$ when $\delta$ increases infinitesimally. This is equivalent to having both constraints shift to the left by the same amount in Figure 1. Hence, the size of the parameter space where predation can coexist with formal sector investment (region A in Figure 1) remains the same. By contrast, the predation uncertainty tolerance threshold given in (11) shifts to the left by $-\tau_{\delta} f(k)(1 - p)$. This renders the parameter space where partial property rights are feasible (region B in Figure 1) to expand (since $p < 1$). Note that a rise in the human capital share of the political elites translates into a decline in the human capital share of the economic elites. This means as $\delta$ increases, the collective capacity of the economic elites to take advantage of partial property rights and raise the cost of predation on the political elites declines. This effect will be reflected in a lower $p$. Therefore, a rise in the human capital share of the political elites shifts the predation uncertainty tolerance threshold more than it would have if the human capital of the economic elites did not determine the effectiveness of partial property rights. Ultimately, as a rise in $\delta$ shifts all constraints to the left (except the formal sector profitability threshold given in (9)), it will leave more space for intra-elite democracy as the only option to induce investment in the formal sector (i.e. region C expands).

**Proposition 3.** Better educated political elites (relative to the economic elites) generally favor the protection of property rights; and depending on the marginal effect of human capital on the collective efficiency of predation, they will be forced to institute partial democracy more often.

The effect of the rise in the formal sector return differential in human capital can stem from either the rise in formal sector returns or a corresponding decline in the
informal sector. The first case, the rise in formal sector returns, has a monotonic effect on property rights. When it comes to the second case, i.e. the decline in informal sector returns, the effect on property rights becomes ambiguous because $\hat{w}$ enters the payoffs of both elite groups explicitly.  

First, note that the decline in informal sector returns will always have a positive effect on the formalization of the economy. But as long as the formal sector profitability threshold is attained, it will induce formalization without the equivalent concession for property rights protection because it shifts the exit constraint to the right more than it increases the political elites’ share of the premium on human capital (because $\delta<1$). On the contrary, when both the formal sector profitability and resource-rent intensity thresholds are attained, a decline in informal sector returns equivalent to $\Delta \hat{w}$ will induce property rights protection accompanied by partial democratization as long as the following condition holds,

$$\delta (w - \hat{w}) - \left( \frac{f(k) - \hat{w} - \frac{\gamma k}{H}}{H} \right) \leq (1 - \delta) \Delta \hat{w}$$

The above condition implies that if the share of the human capital premium accruing to the political elites is high, but not too high, a sufficiently large decline in informal sector returns to human capital can encourage investment in the formal sector and promote intra-elite democratization.

In the present model democratization emerges as a means to the end of credible property rights. But as I have already mentioned, what determines the use of democracy as a commitment device is not only the share of human capital of the political elites but also the level of efficiency of the subsequent political process as well as the resource rent. Given a human capital range where democracy is feasible, the critical threshold that determines the establishment of credible property rights is given by changing the inequality in (12) into equality as follows,

$$\delta (w - \hat{w}) \geq \frac{R - \alpha R^\theta}{H} = \Psi$$

(13)

Although I have already discussed the intuition behind the parameters affecting democracy, I now show more formally the corresponding impact of other factors on the emergence of property rights in conjunction with democracy. First higher resource rents raise the threshold in (13) and make democratization more unlikely,

$$\frac{\partial \Psi}{\partial R} = \frac{1}{HR} (R - R^\theta \theta \alpha) > 0$$

Note that the formal sector wage does not feature explicitly in the payoff of the economic elites as a positive addition because the market valuation of human capital is important to the economic elites so far as the externally employed portion is concerned because they are residual claimants of production.

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Second, the efficiency of the political process, which increases in \( \theta \), encourages democratization by lowering the threshold level of human capital premium the political elites require to compensate for the risk of losing rents,

\[
\frac{\partial \Psi}{\partial \theta} = -\frac{1}{H} R^\theta \alpha \ln R < 0, \forall R > 1
\]

Finally, more populous political elites (with upper bound of half of the elite population), will make democratization easier because the per capita loss of resource rents will not be prohibitively high,

\[
\frac{\partial \Psi}{\partial \alpha} = -\frac{1}{H} R^\theta < 0
\]

IV. Conclusion

History has proven repeatedly that the transition to improved political and economic institutions should begin with the consolidation of rule of law among the elites themselves. This paper has traced a strategic link between the distribution of human capital among the elites and the likelihood of establishing stable property rights. The analysis has also shed light on the potential effect of educated migration on the commitment to respect property rights. In the presence of institutional mechanisms to ensure a sufficiently probable protection of property rights, it has been shown that the economic elites might settle for an intermediate arrangement short of political democracy.

The distribution of productive human capital between the political and economic elite groups is demonstrated to have a crucial effect in determining the property rights regime through the corresponding need to secure investment in physical capital. A disproportionate share of human capital possessed by either of the elite groups could drive out investment to the informal sector or keep the society in a predatory equilibrium. A sufficiently high share of productive human capital possessed by the political elites could induce intra-elite democracy in the interest of ruling out ex-post predation. In cases where the informal sector is more enticing for human capital, there is a high probability that all physical capital exits the formal sector because the political elites do not find any incentive to commit to not predate.

The existence of educated aristocracy in Malaysia who were ready to take power after independence and claim their share in the capitalist system of production created confidence in the stability of property rights. Although the Malay elites have always reserved political power for themselves, they have committed to observe the protection...
of property rights through a partially institutionalized system. Malaysia might not be claimed to have instituted intra-elite democracy; but it has been farther ahead in creating the institutional arrangement to stave off outright predation. On the contrary, the demise of the Zimbabwean economy and the obliteration of property right institutions in that country could be partly attributed to the historical inequality between the human capital endowments of the white minority and the post-independence black ruling class. This structural problem has been compounded by the readily available exit options presented to the educated whites by South Africa and Britain. The erosion of confidence that had begun sometime before independence culminated in the form of an all-out exit since the beginning of the 2000s. The comparative experience of Malaysia and Zimbabwe stands in stark contrast against the favorable view of settler colonialism as a source of better institutions adhered by Acemoglu et al. (2001).

Apart from the narratives presented in this paper, the theoretical model could be used to interpret some broader political economy patterns that could be relevant for several countries. Two such interpretations are outlined here. One: in countries where the formal sector features some sort of protectionist or natural resource rent that would make the sector attractive to investors regardless of how little human capital the political elites (i.e. policy makers) posses, predation tend to coexist with investment. Two: if the expected probability of high monitoring cost of predation or ease of evading predation is positively correlated with expansion of economic activities, high growth developing countries could be trapped in non-democracy equilibrium.

The general literature on property rights institutions clearly underlines the role of stable property rights for promoting investment in physical and human capital. Nevertheless, the present paper started off with the simplifying assumption that the stock and distribution of human capital is exogenous. In fact, since the domain of human capital is confined to the elites and because the elites are supposed to accumulate human capital by virtue of their social position, the assumption will not be pernicious. But there is a viable potential for future research in endogenizing human capital. The possible extension of the game into an infinite horizon dynamic game could result in a lot of interesting features by way of integrating the stochastic nature of partially institutionalized property rights well into the body of the game.
References


CHAPTER TWO

Does Education Promote Stable Property Rights?

Biniam Bedasso

Abstract
This paper sets out to establish an empirical link between education and property rights. The analysis is based on a new index of property rights derived from a set of commonly used indicators. As expected, education has a generally positive impact on property rights. But the relationship is not linear. The effect also depends on level of income. More education might not always be good for property rights in low-income countries. In terms of distribution, it is shown that moderate levels of human capital inequality do not hurt property rights as long as the average level of education is not too low. Instrumental variable estimation demonstrates that the schooling of the least educated 60 percent population is better identified to measure the impact of human capital on property rights than mean years of schooling. The dynamic panel estimation of the relationship reveals that it takes some time before an increase in the human capital of the least educated 60 percent population bears a positive impact on property right institutions. The independent influence of education on property rights is found to be stronger than that of income in most specifications.

Key words: Property rights, education, human capital inequality

JEL classification: O10, P16

1. Introduction

There is a natural tendency to automatically associate education with positive socio-economic transformation. The fact that two of the eight Millennium Development Goals (MDGs) are related to education is a testament to this tendency prevailing among national and international policy circles. When Lipset (1960) argued that educated people are more likely to build fairly robust political institutions, the argument had been taken for granted that it was not exposed to empirical scrutiny until recently. When the empirical examinations are finally initiated, they focused on the
link between education and democratic institutions, leaving aside the presumably crucial relationship between education and economic institutions such as property rights (Barro (1999), Acemoglu et al. (2005), Castello-Climent (2008)). The closest attempt to examine the impact of human capital on economic institutions came in Glaeser et al (2004). But they eventually dropped risk of expropriation, which is the presumed indicator for property rights, on the ground that it was an outcome indicator conceptually unfit to measure institutions. On a more general level, the empirical scrutiny of the relationship between human capital and economic institutions is overshadowed by the painstaking interest on the direction of causality between institutions and level of development ((Acemoglu et al. (2001), Rodrik et al. (2004), Olson et al. (2000), Knack and Kefeer (1995)). Education, lumped together with other indicators of development and proxied by per capita income, usually falls out of the picture.

This paper attempts to explicitly introduce human capital in the empirical analysis of the determinants of property right institutions. In a way that throws an incisive light on cruder representations of modernization theory that tend to mix up the roles of income and human capital, specific attention is given to separate the independent and interacting effects of the two factors. Although human capital is mainly conceptualized as average level of education, distributional measures are also considered in the analysis. This paper also tries to tackle one of the problems that have pestered the empirical analysis of property rights, i.e. measurement of property rights, by proposing a new composite index built on a widely used set of indicators. In constructing the index, a fairly inclusive conceptualization of property rights that cuts across normative definitions is applied. As an alternative to the new index built on perception-based indicators, an entirely objective proxy for property rights is adopted from Clague et al (1999), measuring the contract intensiveness of the financial sector.

In the theoretical literature, the transmission mechanism between education and property right institutions is not well defined and clearly articulated. In most political economy models, education is treated as an endogenous outcome that would be determined as part of the political equilibrium rather than as a predetermined factor that affects political and economic institutions (see for example, Perotti (1993), Bourguignon and Verdier (2000), Grossman and Kim (2003), Galor and Moav (2006)). The only rigorous work that I am aware of which attempts to formally analyze the impact of education on an institutional feature closely related to property rights is Eicher et al. (2009). Although they still treat education as endogenous to institutional structures, Eicher et al. (2009) predict that the level of education has a non-monotonic relationship with corruption. They argue that “economies with intermediate levels of education remain in a poverty trap since the level of skills creates sufficient corruption rents but not enough monitoring” (pp. 205).
Although the logic behind the presumed link running from education to property rights is not formally developed in the current paper, it could be articulated as follows. In most societies in general and in non-democracies in particular, the first people to get quality education are children of the political elites. Once sufficiently large portion of the children of the political elites are educated, they start gaining interest in careers outside the political establishment. As the political elites develop a stake in the productive sectors of the economy, they will have incentives to put up institutions to protect property rights. The alignment of the interests of the political elites and the owners of physical capital occurs through the channel of capital-skill complementarities. In the presence of such complementarities, the political elites become keen on assuring the business elites to invest in the capital stock that the former need to complement their offspring’s human capital. Such intra-elite bargains to secure physical capital investment could be viewed only as partial institutionalization of property rights. However, once the elites have accumulated sufficient physical capital, they need the market to supply them with more skilled labor such that they encourage public investment in education (Galor and Moav, 2006). This allows for yet another iteration of institutionalization in which a newly skilled constituency tries to establish broader set of property rights in an attempt to attract more capital investment. This means the scope of property rights institutions differs when the non-elite acquire more human capital from what it is when only the elites are educated. Accordingly, in addition to the average level of education, the distribution of human capital can be taken as a key determinant of the security of property rights.

The abovementioned mechanisms link education to pre-conceived formal institutions. But even in the absence such institutions protecting property rights, the very structure of a modern economy with abundant human capital may hinder expropriation. For one thing, assets and output in a skill-intensive economy are more likely to be difficult to expropriate. For another, more educated people might find it easier to hide their worth. Therefore, even when de jure institutions are not established, there will be de facto mechanisms to protect property rights.

The first set of empirical results in this paper are aimed at documenting basic empirical regularities in the relationship between property rights and education controlling only for rudimentary sources of endogeneity (i.e. reverse causality).

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13. Bueno de Mesquita and Smith (2011) argue that, for authoritarian regimes, world-class higher education is a prerogative of the elites: “Dictators also like to have their children educated in leading universities in the United States and the United Kingdom. In fact, one might also conclude that Oxford is a breeding ground for authoritarians. It certainly is the alma mater of many, including Zimbabwe’s Robert Mugabe, the Bhutto family of Pakistan, kings of Jordan, Bhutan, Malaysia, and even little Tonga” (pp. 109).
In latter estimations of the relationship, though, I use standard methods of identification to take care of the endogeneity issue more thoroughly. Generally, the econometric evidence in this paper provides support to modernization theory by revealing the positive impact of education on property rights. However, the impact is not linear and independent of the level of income. Human capital investment helps countries in the lower and upper strata of average education to improve their property right institutions marginally more than the ones with intermediate education. Although education is found to outperform income in most specifications, its effect does crucially depend on the level of income of the country. Unless their incomes increase simultaneously with their stock of human capital, low income countries could have their property right institutions destabilized by educating more of their citizens. The distribution of education is also important in determining the state of property rights. However, once the level of education is controlled for, the distribution is not independently relevant until countries become relatively more egalitarian. The results on some of the control variables are also worth noting on their own. For instance, democracy, as represented by constraint on the executive, is found to be less pertinent to de facto property rights. Between the two alternative measurements of stock of human capital used in this paper, cumulative 3rd quintile education is shown to be more robust from the point of view of econometric identification. Nevertheless, in terms of general explanatory power, cumulative 3rd quintile education is trumped by mean years of education in the benchmark specifications.

The rest of the paper is organized as follows: section two provides substantive background to the conceptualization and measurement of property rights adopted in this paper. Section three is devoted to a brief review of the literature on different schools of thought regarding the determinants of property rights. Section four describes the data and lays down the econometric methodology. Section five presents the benchmark results. Section six deals with issues of identification by applying instrumental variable and dynamic panel techniques. Section seven concludes.

II. Definition and measurement of property rights

No matter how ubiquitously it has been used across the economics literature, property right is a sparsely defined and highly contextualized concept. Armen Alchian defines property rights in The New Palgrave dictionary of economics as “a socially enforced
right to select uses of an economic good”. A more nuanced definition of property rights normally follows the ‘bundle of rights’ approach by enumerating the different aspects of property rights such as the right to consume, the right to earn income from, and the right to alienate assets (Barzel (1997), Frye (2004)). This idea of bundling has its root in the in personam conceptualization of property rights which is based on the individual agent as the center of definition of the ‘right’ as opposed to the in rem conceptualization which is centered at the piece of the property itself (Yonai, 2007).

Essentially, property rights are created because resources are scarce and there is a threat of predation. Hence, our understanding of property rights depends on the origin and scope of the potential threat on property. This, in turn, depends on our perception of the state of nature which precedes the existence of any social contract. There are two major strands of thought in social contract theory which offer different perspectives on the source of the threat on property and the corresponding solution. In the view of Thomas Hobbes, the threat emanates from the selfish interest of individuals and their temptations to encroach over other peoples’ property, which essentially renders life in the state of nature to be “solitary, poor, nasty, brutish and short”. The Hobbesean school of thought deems a strong king (or state) to be the paramount arbiter of contracts and protector of property. John Locke, on the contrary, does not necessarily consider the state of nature to be a warlike situation. When man mixes his labor to things of nature to produce value, the right to that property will automatically adhere in the individual regardless of any ‘leviathan’ to define property rights. The individual also retains the right for impartial protection of property. The Lockean school of thought reckons that the state itself could infringe on private property. Therefore Locke advocates limited government and enhanced civil society.

The classical dichotomy regarding the salience of private and public threats against property resonates in the recent literature in the form of the contrast between the contract theory of the state and the predatory theory of the state (North, 1981). Built on transaction cost theory, in much of conventional microeconomics, property rights are linked to the completeness and enforceability of contracts. In that case, the state is viewed as a neutral party that enforces contracts and creates an enabling environment. But, the political economy literature identifies the state as an apparatus that could be used to transfer resources from one group to another. Hence, the state is not only supposed to check private trespassers on property, but also to credibly commit to not renage on its own promises (Frye, 2004).

So, what is the ultimate yardstick one should be using to determine whether or not property rights are protected? How do we judge systems of government that are not strictly constrained by law but in which self-interested dictators choose to maintain stable property rights? There lies the contentious issue of whether property rights should
be treated as *de jure* or *de facto* constraints. The conceptualization of institutions as the ‘rules of the game’ constraining individual behavior limits the measurement of property rights to *de jure* rules that are written in the form of a legal code or imprinted as an informal norm. However, institutions could also be defined as “a system of social factors that conjointly generate a regularity of behavior” (Greif, 2006, pp. 30). In the latter case, the complex ‘system of social factors’ might not be readily observable and should be imputed mostly by examining the observed ‘regularity of behavior’. The adoption of the broader definition provided by Avner Greif furnishes more room to the measurement of property rights as *de facto* constraints that are reflected in the outcomes rather than in the rule books.¹⁴

The scope of property rights also differs depending on the specific context and the nature of property holding. In most developing countries, for instance, land is the single most crucial asset for the majority of the population. Therefore the security of land rights is considered to be the centerpiece of the analysis of property rights in such societies. But what is important in the modern day economy where resources are mobile and sectors are increasingly inter-linked is the analysis of systemic property rights. The definition of private property might be stretched to include such intangible assets as the future value of money determined by market interest rates. If a government prints money arbitrarily to create inflation and erode the value of the deposits of private agents, it could be considered as if it had violated their property rights (Clague et al., 1996).

For this particular paper, I have defined property rights in the broadest macroeconomic dimension that cuts across different sectors. The conceptualization of property rights applied in the subsequent empirical analysis does not hinge up on a specific form of property holding (for example, private property) or a particular legal framework. Accordingly, the current definition of property rights is more in line with the Greifian conceptualization of institutions as systems of social factors observed through the regularity of behavior that they generate. The specific indicators I used for the empirical analysis are supposed to capture the notion of constraints on the predatory state as well as the enforcement of contract between private agents.

Most of the measurements of institutional features that are available out there with a considerable length of time series are subjective ratings of different aspects of institutions provided by investors or experts. The subjectivity of the indicators has its own problem stemming from limited information and plain human bias. However, from

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¹⁴ Glaeser et al. (2004) insist that empirical measurement of institutions should strictly conform to the conceptualization of institutions as constraints. Therefore, they argue, outcomes of conscious choices by unconstrained politicians should not be considered as institutions.
the point of view of the instrumental importance of property rights information as the basis of investment decisions, what really matters is what the investors and, to a certain extent the experts, perceive the security of property rights to be in a particular economy. The longest available time series of different indicators related to political and economic risk is provided in the International Country Risk Guide (ICRG) dataset. But among the raw ICRG indicators, there is no single indicator measuring the security of property rights as a whole. Therefore I performed a principal component analysis using the *corruption, law and order* and *bureaucratic quality* indicators in order to come up with a single composite indicator.

Corruption by government officials is a direct violation of property rights when it takes the form of arbitrary expropriation. When corruption happens with the purpose of leveraging transactions, it could be viewed as an outcome of a Coasian bargaining to overcome ill-defined property rights (Shleifer and Vishny, 1994). Nevertheless, given the fact that the corrupt official cannot be held accountable to an explicit contract, corruption will not be an efficient solution. Therefore, even in the Coasian sense, corruption cannot be deemed as anything more than a symptom of poorly defined property rights. Bureaucratic quality is linked to the general idea of property rights through its effect on the capacity of the state to protect property from trespassing and to enforce contracts. Apart from its independent effect on state capacity, bureaucratic quality can also be interlinked with corruption, bearing a combined effect on the enforcement of property rights by public officials (Acemoglu and Verdier, 1998). Law and order represents an indicator reflecting the overall semblance of rule of law in the political and economic sphere. While corruption and bureaucratic quality are mainly about specific state-society relationships, law and order measures the robustness of the social contract among private agents as well as between the state and private agents. The composite index constructed to evaluate property rights in the present paper represents a blanket measurement of the state of property rights in a given country as weighted by the relative importance of the three indicators discussed above.

### III. Determinants of property rights: the literature

There is substantial diversity in the empirical evidence on the determinants of property rights that abounds all across the economics, legal and political science literatures. This proliferation of wide-ranging determinants is indicative of the effect of the divergent definitions and measurements of property rights discussed in the previous section. In general, one can roughly identify four major groups of hypothesis that have
gained prominence over the years in the empirical analysis of the determinants of property rights.

The legal origin hypothesis: Property rights are as much enrooted in the legal domain as they are in economics. Therefore, the way the legal code is formulated and litigations are handled affects the security of property rights. The case for legal origins is made most prominently by La Porta et al. (1998, 1999). Their empirical analysis show that a common law legal origin contributes to better protection of property rights. They attribute the strong performance of common law to the efficiency and adaptability of the litigation process. Levine (2005) reviews the criticisms directed toward the legal origin hypothesis. According to the critics, the British exported more viable political and economic systems along with the common law. Moreover, it is not easy to impose the straight jacket of legal origins on various legal systems of similar foundation that are currently situated in starkly contrasting social contexts.

The endowment and critical juncture hypothesis: In parts of the literature, the historical distribution of wealth and other endowments such as land is recognized to have affected early institutions which have persisted to contemporary periods due to path dependence. Engerman and Sokoloff (1997) identified the impact of different types of natural endowments such as minerals and crop cultivation on the divergent development of property rights in northern and southern America. Acemoglu et al. (2001) traced contemporary differences in risk of expropriation to the diseases environment in early colonial times and the contemporaneous potential for building settler institutions.

But it is not only the pattern of endowment that existed in historical times that is thought to be contributing to the state of property rights. Hodler (2006) argues that natural resource abundance in contemporary times also bears a negative impact on the security of property rights. Beck and Laeven (2006) show, in a sample of transition countries, that those who are dependent on natural resources exhibited slower pace of reform in areas of corruption and rule of law. Apart from physical resources, one may also consider the role of social and cultural endowments such as ethnic fractionalization. In this regard, Keefer and Knack (2002) demonstrate that ethnic tension can hurt the protection of property rights. However, the evidence is not conclusive. While Hodler (2006) maintains that less fractionalized societies have stronger property rights institutions, Alesina et al. (2003) fail to find a statistically significant relationship between property rights and ethnic fractionalization.
The political regime hypothesis: There is a recent tendency to link the security of property rights with democratic institutions. For instance, Kunsten (2011) provides econometric evidence showing that democracy could enhance property rights. This is in spite of the longstanding schools of thought of the nineteenth century which have established that democracy can pose a serious threat to property rights (Przeworski and Limongi, 1993). A detailed analysis of the potential impact of regime type on the protection of property rights is conducted by Clague et al. (1996). They found that, at a general level, democracies secure greater protection of property rights than autocracies. But what is more important is the duration and stability of the political system. Their results demonstrate that stable autocracies might find it in their interest to protect property rights even better than transient democracies.

Modernization hypothesis: Almost all attempts to empirically identify the effect of property rights on the level of income have been laden with problems of endogeneity. This econometric phenomenon provides indirect evidence in support of the 'enhanced modernization hypothesis'\textsuperscript{15}, which presupposes the importance of socioeconomic development to the strengthening of property right institutions. Due to the same reason of simultaneity that makes identifying the effect of property rights on economic development difficult, the empirical testing of the modernization hypothesis has been problematic.

Since 'modernization' is not limited to the mere growth of income, the role of education in transforming the fundamental institutions of society has been brought to light both in the theoretical and empirical literatures (Lipset (1960), Barro (1999), Glaeser et al. (2004), Castello-Climent (2008)) However, the focus of the empirical analysis has been confined largely to political institutions rather than economic institutions. In further exploring the modernizing impacts of education, the present paper casts aside the traditional focus on political institutions, usually restricted to the dichotomy of democracies versus non-democracies. Rather, it zooms in on the security of property rights as captured by the correlation of observable variables such as corruption and bureaucratic quality.

\textsuperscript{15} It is qualified as 'enhanced' because the original modernization hypothesis focuses on political institutions rather than property rights.
IV. Data and empirical strategy

As noted above, the data on the major variable of interest, i.e. property rights, is a composite transformation of three individual indicators from the ICRG dataset for the period between 1985 and 2005. I use Principal Component Analysis (PCA) to distill the information jointly contained in all the three indicators to arrive at a composite index that may represent the general state of property rights in an economy. The Keiser-Meyer-Olkin (KMO) measure of sampling adequacy, which is normally employed to determine whether the variables under investigation warrant a PCA, turns out an average of 0.72, indicating the variables are ‘moderately’ adequate. Subsequently, a PCA was conducted on the indicators of corruption, bureaucratic quality and law and order for all 21 years.

The results show that the first principal component stands out as the closest measurement of property rights with all the three variables loading on it positively all the time. On average, the first component alone explains 74.4 percent of the total variance in the three base variables. The newly constructed series on property rights consists of the scores of the countries in the dataset on the first principal component for the years data is available.

Figure 1 provides a comparison of the newly constructed ICRG composite index with two of the most widely used indicators of property rights: the Fraser Institute property rights index and the Heritage Foundation property rights index. Both panels of figure 1 display the strong correlation that the new ICRG composite index maintains with established indicators of property rights. The two indices are more strongly correlated with the new ICRG index than they are correlated with each other.

In addition to the subjective index described above, I adopt the objective measure of Contract Intensive Money (CIM) proposed by Clague et al. (1999) as an alternative measurement of property rights. Precisely, CIM is the ratio of non-currency money to the total money supply in the economy. This ratio reflects the general climate of contract enforcement and property rights protection because, it basically measures the confidence agents have to hold their assets in financial products other than currency. A higher CIM ratio indicates more effective enforcement of contracts and better protection of property rights.

16. The present index is preferred over the Fraser Institute index because it balances bureaucratic enforcement of contracts with judicial enforcement, whereas the Fraser index exclusively focuses on the later. Compared to the Heritage Foundation index, the present index refrains from assuming ‘private property’ and tends to be inclusive of all forms of property holding. It also offers a longer time series than Heritage’s index.
Fig 1: Comparison of the new ICRG composite index with other commonly used Property rights indicators
The following baseline specification, assuming away nonlinearities, is considered to analyze the link between property rights and education;

\[ PRights_{it} = \alpha_t + \beta PRights_{i,t-T} + \gamma Ed_{i,t-T} + Z_{i,t-T} \phi + u_{it} \] (1)

where \( i \) is country, \( t \) is time period, and \( T \) is time lag. \( \alpha, \beta, \gamma \text{ and } \phi \) are parameters to be estimated whereas \( u \) is random disturbance. \( PRights \) stands for either one of the indicators of property rights described above. The property rights indicator enters the set of explanatory variables too with a lag of \( T \) periods. The lagged dependent variable formulation operationalizes the notion of institutional persistence. \( Ed \) represents the main explanatory variable of interest, i.e. education. Mean years of schooling of population aged over 25 years, which is the most widely used measurement of education, is employed as an indicator of the level of education. In addition to mean years of education, “Cumulative 3rd quintile education” is also used as an alternative indicator of the level of education with special emphasis to the schooling of the less educated 60 percent of the population.

The control variables are represented by the vector \( Z \) in equation (1). The current empirical strategy draws on the set of potential determinants of property rights highlighted in the relevant literature and reviewed in section three to control for the effects of observable country specific effects. Along the line of the legal origin hypothesis, a dummy variable indicating whether a country has a common law system (or British origin) is incorporated as a control variable. The endowment school of thought is taken account of by the inclusion of European settler mortality rate and share of fuels in total exports. The first variable controls for historical diseases environment and its implications for centuries-old critical junctures. The latter variable takes care of the effect of contemporary resource abundance. The indicators for social endowment and harmony are the indices of ethnic fractionalization, ethnic polarization and Gini coefficient for income inequality. Since data on Gini coefficients of individual countries is scanty, for the estimation of the property rights model in year \( t \), I take the average of all recorded coefficients in the decade preceding year \( t \).

The vector of control variables also includes a measurement of the level of democratic accountability in the country. The 7-scale variable of executive constraint is incorporated as such measurement indicating regime characteristics. In line with the modernization hypothesis, government capacity to enforce property rights should be considered as one of the determinants of the security of property rights. In the present analysis, government capacity is captured by the ratio of taxes and social security contributions to GDP. Finally, the most natural control and the central determinant of property rights, according to the modernization hypothesis, is the level of GDP per capita.
There is no prior restriction imposed on the type of countries that would be included in the sample. The only filtering that is carried out prior to the analysis is the exclusion of small island nations and non-autonomous territories. In most cases the availability of data on a specific variable is the only determining factor for the number of observations that are actually included in a particular regression.

### Table 1: Descriptive statistics

<table>
<thead>
<tr>
<th>Variable</th>
<th>Obs</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>ICRG composite index, 1985-2005</td>
<td>641</td>
<td>0.0153</td>
<td>1.517</td>
<td>-3.69</td>
<td>3.61</td>
</tr>
<tr>
<td>Contract Intensive Money (CIM ratio), 1980-2005</td>
<td>669</td>
<td>0.7984</td>
<td>0.1515</td>
<td>0.176</td>
<td>1</td>
</tr>
<tr>
<td>Mean years of education, 1980-2000</td>
<td>717</td>
<td>5.944</td>
<td>2.967</td>
<td>0.031</td>
<td>13.2</td>
</tr>
<tr>
<td>Cumulative 3\textsuperscript{rd} quintile education, 1985-2000</td>
<td>508</td>
<td>0.2738</td>
<td>0.1808</td>
<td>0</td>
<td>0.545</td>
</tr>
<tr>
<td>Ln GDP per capita, 1985-2000</td>
<td>778</td>
<td>8.122</td>
<td>1.176</td>
<td>5.05</td>
<td>10.7</td>
</tr>
<tr>
<td>Log settler mortality (duplicated for all years)</td>
<td>392</td>
<td>4.699</td>
<td>1.182</td>
<td>2.14</td>
<td>7.98</td>
</tr>
<tr>
<td>Share of fuel in merchandise export, 1980-2000</td>
<td>611</td>
<td>16.64</td>
<td>27.19</td>
<td>0</td>
<td>100</td>
</tr>
<tr>
<td>Common law legal origin (duplicated for all years)</td>
<td>796</td>
<td>0.3165</td>
<td>0.4663</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Tax revenue to GDP ratio, 1980-1999</td>
<td>333</td>
<td>20.98</td>
<td>9.808</td>
<td>0.43</td>
<td>44.7</td>
</tr>
<tr>
<td>Executive constraint, 1980-2000</td>
<td>681</td>
<td>4.136</td>
<td>2.345</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>Ethnic polarization index (duplicated for all years)</td>
<td>642</td>
<td>0.5162</td>
<td>0.2464</td>
<td>0.016</td>
<td>0.982</td>
</tr>
<tr>
<td>Ethnic fractionalization index (duplicated for all years)</td>
<td>642</td>
<td>0.4464</td>
<td>0.2778</td>
<td>0.009</td>
<td>0.958</td>
</tr>
<tr>
<td>Gini Coefficient, 1970-1995</td>
<td>350</td>
<td>38.66</td>
<td>10.93</td>
<td>17.6</td>
<td>73.2</td>
</tr>
</tbody>
</table>

The empirical analysis is undertaken at various levels with the separate objectives of documenting empirical regularities and identifying causality. The baseline specification in (1) is estimated using the Seemingly Unrelated Regression (SUR) method. This particular method exploits the panel characteristics of the data in a subtle manner at the same time as it features the simplicity of least-square methods such as pooled OLS. Since data on schooling is reported in five-year intervals, we have a four-equation system of regressions for the period between 1985 and 2005 (i.e. for years 1990, 1995, 2000 and 2005). For each country, the error term, $u_{it}$, is allowed to be correlated over time. The constant term varies over the four periods, capturing the time effect. But all the other parameters are constrained to be constant over time in a way that shows the permanent effect of the explanatory variables.

Although the baseline SUR system, by taking the five-year lags of all the explanatory variables, reduces the effect of endogeneity that might have occurred in the form of
reverse causality, it could not rule out the type of endogeneity that results from both the dependent and independent variables being generated by a common unobserved process. In an attempt to tackle the general problem of endogeneity and improve the accuracy of identification, two strategies of instrumental variable estimation are devised: external instruments and internal instruments. The external instruments approach employs the standard two-stage least squares estimator, while the internal instruments approach uses Generalized Method of Moments (GMM) to estimate the equation in first differences. In the case of the later approach, due to the high degree of persistence in the education variables and the consequent inadequacy of first differences to pick up sufficient variation, System GMM is the preferred method of estimation. This is specifically because System GMM estimates the equations in levels by instrumenting them with the lagged first differences.

V. Benchmark estimates

The seemingly unrelated systems of equation estimate the baseline relationship between property rights and the level of education. Table 2 presents the results of the most parsimonious specifications that include assortment of education variables along with per capita income and five-year lags of property rights as controls. The first two columns provide strong initial evidence in support of the general impact of education on property rights. Column 1 shows that a one standard deviation increase in mean years of education (i.e. 2.93 years) produces a rise of 0.22 or 14 percent of standard deviation in the score of property rights in the short-run. Due to the dynamic persistence of property rights over time, the long-run effect of the same increase in education will be a rise in property rights of 0.94 or 61 percent of standard deviation. Compared to one standard deviation increase in natural logarithm of per capita income, which induces 7 percent and 34 percent rise in the short- and long-run respectively, the mean level of education performs strongly in explaining the quality of property rights.

If the alternative measure of cumulative 3rd quintile education is used instead, a one standard deviation increase in that particular indicator will results in a 0.14 rise in the score of property rights (equivalent to 9 percent of standard deviation). When both indicators of levels of education are included in the regression, mean years of education trumps cumulative 3rd quintile education in terms of statistical significance in explaining property rights (see column 3). This result suggests that for the blanket concept of property rights embodied in the currently employed index, the general level of education is more important than the share of the less educated population. But columns 7-9 tend to tell a different story as to the relative importance of the two variables. According to those results, when property rights are measured by the more
specific indicator of contract intensive money (CIM-ratio), cumulative 3rd quintile education becomes more important in explaining their security. This is probably because financial deepening, a proximate factor that is simultaneously captured by CIM-ratio, requires more broad-based education.

Table 2: Property rights and education: benchmark SUR estimates

<table>
<thead>
<tr>
<th></th>
<th>Property rights: ICRG composite index</th>
<th>Property rights: CIM ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(1) (2) (3) (4) (5) (6)</td>
<td>(7) (8) (9)</td>
</tr>
<tr>
<td>ICRG composite index</td>
<td>.768(^a) (.025)</td>
<td>.860(^a) (.024)</td>
</tr>
<tr>
<td>CIM ratio</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ln GDP per capita</td>
<td>.106(^a) (.040)</td>
<td>.020(^a) (.003)</td>
</tr>
<tr>
<td>Mean years of education</td>
<td>.075(^a) (.015)</td>
<td>.002(^a) (.001)</td>
</tr>
<tr>
<td>Cumulative 3rd Quintile</td>
<td>.763(^a) (.268)</td>
<td>.942(^a) (.192)</td>
</tr>
<tr>
<td>Mean years of education × Ln</td>
<td>.317(^a) (.116)</td>
<td></td>
</tr>
<tr>
<td>GDP per capita</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lower middle education</td>
<td>.290(^a) (.123)</td>
<td></td>
</tr>
<tr>
<td>Upper middle education</td>
<td>.643(^a) (.145)</td>
<td></td>
</tr>
<tr>
<td>Upper level education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>-1.2,-1.3 -1.4,-1.5 -1.6,-1.7</td>
<td>.82, .89 -1.1, -1.1</td>
</tr>
<tr>
<td>R-squared</td>
<td>.90, .77 .91, .79</td>
<td>.74, .87 -1.1, -1.1</td>
</tr>
<tr>
<td>N</td>
<td>105, 105 89, 89 89, 89</td>
<td>89, 89 -1.1, -1.1</td>
</tr>
</tbody>
</table>

Standard errors are in parenthesis. a, b, and c denote 1%, 5% and 10% significance level respectively.

Does the marginal effect on property rights increase as countries climb up the average education ladder? Column 4 in table 2 shows that there is a sizable return for moving from the low education category of 2 and less years of average schooling to the lower-middle education category (between 2 and 4 years of average schooling). But the
marginal return in terms of secure property rights declines when countries transition from lower-middle education to upper-middle education category, attaining between 4 to 8 years of schooling. The advancement to the highest category of education, however, boosts the marginal effect of average education to a large extent. The intermittent increase in the marginal effect of education hints that more education might not necessarily imply better property rights. This particular result leads to another curious question: to what extent does the impact of education depend on the level of income?

Table 3: Marginal effects of education at different levels of income

<table>
<thead>
<tr>
<th>Income level (country example as of 1995)</th>
<th>Marginal effect of mean years of education</th>
<th>Marginal effect of cumulative 3rd quintile education</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 (Liberia)</td>
<td>-.068 (.037)</td>
<td>-2.015 (.618)</td>
</tr>
<tr>
<td>2 (Cameroon)</td>
<td>-.028 (.029)</td>
<td>-1.073 (.453)</td>
</tr>
<tr>
<td>3 (Kenya)</td>
<td>.013 (.021)</td>
<td>-.131 (.321)</td>
</tr>
<tr>
<td>4 (Sri Lanka)</td>
<td>.054 (.016)</td>
<td>.811 (.272)</td>
</tr>
<tr>
<td>5 (Malaysia)</td>
<td>.095 (.016)</td>
<td>1.753 (.346)</td>
</tr>
<tr>
<td>6 (Kuwait)</td>
<td>.136 (.021)</td>
<td>2.695 (.489)</td>
</tr>
</tbody>
</table>

Standard errors are in parenthesis. a, b, and c denote 1%, 5% and 10% significance level respectively.

Based on the estimated coefficients given in columns 5 and 6 in table 2, table 3 provides the marginal effects of education at different levels of income. In order to give the comparison a tangible context, the levels of income selected to calculate the marginal effects are matched with countries. Hence, we could predict the comparative impact of an additional year of schooling on the security or property rights in low-income Liberia as opposed to in high-income Kuwait. For both indicators of level of education, the marginal impact of education increases with income. When a country is below a certain threshold level of income, a unilateral rise in schooling does more harm to property rights than it does good. For example, in 1995, if Cameroon increased the level of education attained by the least educated 60 percent of the population by 10 percent without raising its per capita income, it would see its property rights score decline by 0.107 points (7 percent of standard deviation). On the contrary, the same level of improvement in the share of the least educated 60 percent would have brought Malaysia a 0.17 increase in its property rights score.
It is also interesting to compare the sensitivity of the two measures of education to the effect of conditioning on income. As table 3 shows, most of the negative marginal effects are statistically significant for cumulative 3rd quintile education while they are not significant for mean years of education. The absolute magnitude of the effects is also much larger for cumulative 3rd quintile education. Intuitively, increasing the level of education of the lower-middle and working classes in poor countries, without increasing the size of the national cake, will create redistributive pressures that could ultimately undermine stable property rights. Human capital is normally expected to increase income and improve institutions both at the same time. However, the kind of boost in schooling, which does not effectively translate into a rise in productivity, may simply end up producing more skilled predators. From the point of view of the theoretical proposition presented in the introduction, the failure of education to improve property rights in poor countries could be interpreted as a consequence of the lack of capital-skill complementarities in such economies. If the elites or any newly educated constituency do not expect the structural backwardness of the economy to allow a rise in the returns to their education when that human capital is matched with physical capital, they will have little incentive to respect property rights.
Some of the more subtle results of the above analysis warrant further investigation to find out how each of the three constituent indicators of property rights contributes to the baseline relationship between education and systemic property rights as represented by the composite index. To this end, Appendix 2 presents the SUR results of specification (4) of Table 2, rerun with each of the three components of the index as a dependent variable. Column 1 shows that corruption will not be impacted significantly by education until a country attains the uppermost strata of education. Bureaucratic quality is mildly affected by the two middle level categories of schooling; but the biggest impact is still induced by the highest levels of education. Law and order is improved robustly when a country transitions from the lowest to the lower middle levels of education as well as from the upper middle to the uppermost levels of education. Following the baseline specification in columns 5 and 6 of Table 2, the regressions in appendix 3 condition the effects of the three constituent components of property rights on the level of income. As one would expect, bureaucratic quality benefits from increasing levels of schooling no matter how low or high the per capita income of the country may be. In the contrary, it takes the achievement of escaping the group of low-income countries before education bears a positive impact on corruption and law and order. Like it is demonstrated in the estimations based on general property rights in Table 2, more schooling, particularly more schooling for the least educated 60 percent population, could trigger further corruption and lawlessness if education fails to bring about expansion in production at the same time.

Cumulative 3rd quintile education is a distributional measure as well as an indirect indicator of the level of attainment of the less educated 60 percent population. But in the context of this paper, it is employed to serve the second purpose rather than the first one. Therefore, it might be worth considering other distributional measures to examine the impact of education inequality on property rights. This is particularly useful to show what happens to property rights when only the elites are educated as opposed to when public education is well developed. One potential measure is the Gini coefficient of the schooling distribution. But like all the other measures of schooling distribution, the Gini coefficient is highly correlated with mean years of education. This is in the nature of schooling itself. Mostly due to the public good nature of education, better educated societies tend to have fairly distributed schooling. As fig. 3 shows, apart from some dispersion in the middle, the measures of mean years of education and schooling Gini coefficient are strongly correlated. Therefore the difficulty of disentangling the effect of the distribution from the effect of the level of education, which is already evident with regard to cumulative 3rd quintile education (table 1, column 3), reduces the explanatory power of the Gini coefficient (compare columns 1 and 2 in table 4).
Nevertheless the modest level of dispersion among countries with middle-level educational attainment could be exploited by introducing higher-order polynomials of the Gini coefficient predictor. When estimating the polynomial equations, the schooling Gini coefficient is centered by subtracting the cross-sectional mean from each value. This is done to reduce collinearity between the linear and higher-order polynomial terms. The results of the quadratic specification displayed in column 3 of table 4 indicate a downward sloping convex relationship between schooling Gini and property rights. The introduction of a cubic term confirms the existence of a convex relationship. However, the presence of an inflection point could not be confirmed due to the barely significant cubic term. According to the set of graphs displayed in Appendix 4 the negative effect of schooling inequality that holds strongly for countries with low Gini coefficient fades a bit among countries featuring middle-range inequality with Gini coefficients falling, roughly, between 0.4 and 0.55.

On top of Gini coefficient of schooling distribution, ratios of quintile distributions are used to obtain a more nuanced picture of the relationship between education inequality and property rights. Precisely, the shares of the bottom and fourth quintiles with respect to the share of the top or fifth quintile are calculated to represent the two
 extremes of schooling inequality. If a country has a relatively small value of the fourth-to-top quintiles ratio, it means it is comparatively unequal in terms of schooling distribution. On the contrary, if the bottom-to-top quintiles ratio is relatively high, the country is deemed egalitarian its schooling distribution. Columns 5 and 6 show that the coefficient for the fourth-to-top quintile ratio is statistically insignificant whereas the coefficient for the bottom-to-top quintile ratio is significant at 5 percent significance level. Intuitively, low inequality in schooling distribution is good for property rights. However, the converse might not necessarily be true as high inequality is less relevant as long as the average level of schooling is controlled for.

Table 4: Property rights and schooling inequality: benchmark SUR estimates

<table>
<thead>
<tr>
<th></th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
<th>(5)</th>
<th>(6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Property rights: ICRG composite index</td>
<td>.761a</td>
<td>.751a</td>
<td>.735a</td>
<td>.733a</td>
<td>.736a</td>
<td>.749a</td>
</tr>
<tr>
<td></td>
<td>(.026)</td>
<td>(.027)</td>
<td>(.028)</td>
<td>(.028)</td>
<td>(.027)</td>
<td>(.027)</td>
</tr>
<tr>
<td>Ln GDP per capita</td>
<td>.165a</td>
<td>.121a</td>
<td>.138a</td>
<td>.152a</td>
<td>.132a</td>
<td>.121b</td>
</tr>
<tr>
<td></td>
<td>(.050)</td>
<td>(.050)</td>
<td>(.051)</td>
<td>(.051)</td>
<td>(.050)</td>
<td>(.050)</td>
</tr>
<tr>
<td>Mean years of education</td>
<td>.083a</td>
<td>.064b</td>
<td>.056c</td>
<td>.051b</td>
<td>.074a</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(.028)</td>
<td>(.030)</td>
<td>(.030)</td>
<td>(.022)</td>
<td>(.022)</td>
<td></td>
</tr>
<tr>
<td>Schooling Gini coefficient</td>
<td>-.819a</td>
<td>-.009</td>
<td>-1.51c</td>
<td>-.016</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(.221)</td>
<td>(.345)</td>
<td>(.917)</td>
<td>(.425)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Schooling Gini squared</td>
<td>1.33c</td>
<td>2.39b</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(.746)</td>
<td>(.973)</td>
<td></td>
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<td></td>
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<tr>
<td>Schooling Gini cubed</td>
<td>-4.76</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td>(2.99)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bottom quintile – top quintile ratio</td>
<td>.668b</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(.295)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4th quintile– top quintile ratio</td>
<td>.152</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(.194)</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Constant</td>
<td>-.94,-1.0</td>
<td>-1.3,-1.5</td>
<td>-1.0,-1.2</td>
<td>-1.6,-1.7,-</td>
<td>-1.4,-1.5</td>
<td>-1.4,-1.5</td>
</tr>
<tr>
<td></td>
<td>-.98,-1.1</td>
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Standard errors are in parenthesis. a, b, and c denote 1%, 5% and 10% significance level respectively.

*Both the squared and cubed terms are mean-centered
**Table 5: Property rights and education: benchmark SUR estimates with additional controls**

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<th>(1)</th>
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<td><strong>Property rights: ICRG composite index</strong></td>
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<td>(.032)</td>
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<td>Log settler mortality</td>
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<td>Share of fuels in merchandise export</td>
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</table>

Standard errors are in parenthesis. a, b, and c denote 1%, 5% and 10% significance level respectively.
Finally, table 5 offers an overview of how the effect of average level of education fares when other control variables are added to the regression. As a side result, it also sheds light on the significance of the individual control variables independent of income and human capital. When an array of endogenous and exogenous controls are included into the regression one by one, mean years of education maintains its positive influence on property rights. In line with the prediction of downward bias induced by inclusion of endogenous controls in Acemoglu et al. (2001), the inclusion of variables such as income inequality and tax per GDP reduces the magnitude of the education coefficient. The share of fuel exports and the level of income inequality come out with strongly significant negative effect on property rights, lending credence to the endowment and social capital theses, respectively. Ethnic polarization is found to be more relevant than ethnic fractionalization in determining the quality of property rights institutions. Common law legal origin does not seem to have a statistically significant effect when included in the regression together with only income and schooling. However, when the other two exogenous variables are added at the same time as in column 9, common law legal origin stands out as the most significant of them all. Interestingly, democracy as represented by the level of constraint on the executive does not have a statistically significant impact on property rights.

VI. Issues of Identification

Following the benchmark results presented in the previous section, one question that still begs for an answer relates to how well the currently used measures of human capital would fare if subjected to more standard tests of identification. As noted in section 4, the specifications implemented in the benchmark SUR estimation could tackle reverse causality; but the problem of unobserved heterogeneity remains to be taken care of. To that end, both external and internal instrumentation are employed in two separate sets of regressions: two-stage least squares and system GMM, respectively.

The first external instrument that is supposed to determine current human capital without directly influencing contemporary institutions is early education. The rate of primary enrollment in 1920 is employed to represent early education. The fact that this particular variable measures input rather than output, which would be represented by level of attainment, is another reason to expect it to be less correlated with current property rights. The second external instrument is the percentage of protestant population in 1970. The strategy of using Protestantism as an instrument for human capital draws on the literature that links protestant ethics to higher investment on human capital (Becker and Woessmann, 2009). Considered at a rather basic level,
The emphasis of protestant religions on individual reading and self-understanding of the Bible contributes to literacy in less developed countries.

The Wu-Hausman test in table 6 confirms that both measures of human capital are endogenous to the ICRG composite index, while they are found to be exogenous to the CIM ratio. But the instruments employed in the 2SLS regressions failed to identify the effect of mean years of education as signified by the very small p-values of the over-identification test. The over-identification test validated, albeit marginally, the use of the two instruments for identifying the effects of cumulative 3rd quintile education. Therefore, from the point of view of econometric identification, in the current setup, cumulative 3rd quintile education is a more robust measure of human capital. Column 4 shows that, in the specification that seeks to control for income by proxy of latitude, the coefficient of cumulative 3rd quintile education is more than seven times larger than the corresponding coefficient from SUR estimation given in column 2 of table 2. As latitude is not a perfect proxy for per capita income, some of the upward swing in the magnitude of the coefficient could be attributed to the omission of the income variable.

The above issue of omitted income variable as well as more nuanced forms of unobserved heterogeneity is remedied by using system GMM estimation. Since per capita income could be instrumented for by its own lagged values, it is directly introduced in the system GMM estimation as an endogenous variable. As table 7 displays, two lags of the education variable are added as regressors to partially overcome the high degree of persistence in the stock of human capital and to distinguish between short-run and medium-run effects. In four of the five specifications in table 7, the 10-year lag of cumulative 3rd quintile education comes out with strong positive coefficient statistically significant at least at 10 percent level. However, the 5-year lag of the same variable appears with negative coefficient for all respective specifications. The combination of those results implies that, once the major chunk of human capital that has been attained 10 years ago is controlled for, transitionary increases in the education of the less educated 60 percent population could destabilize property rights. Column 1, however, indicates that both lags of the education variable are rendered insignificant if contemporary income is incorporated as a regressor. Comparing the results of column 1 where income is the more robust predictor of property rights with those of the rest of the table where cumulative 3rd quintile education performs better, one gets a hint that lagged schooling might be working through current income to determine property rights. Among the exogenous variables included as additional controls
in columns 3 – 5, ethnic polarization is the only variable that is found to be statistically significant in explaining property rights. In agreement with Keefer and Knack (2002), ethnic polarization is negatively associated with property rights. It should also be noted that the high level of persistence exhibited in the autoregressive components of all specifications indicates the presence of institutional path-dependence.

Table 6: **IV regressions of property rights on education**

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<th>Property rights: ICRG composite index</th>
<th>Property rights: CIM ratio</th>
</tr>
</thead>
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<tr>
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<td>(1)</td>
<td>(2)</td>
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<tr>
<td>Mean years of education, 1970-2005</td>
<td>.528&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.455&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>Cumulative 3&lt;sup&gt;rd&lt;/sup&gt; quintile education, 1970-2000</td>
<td>9.43&lt;sup&gt;a&lt;/sup&gt;</td>
<td>5.66&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>Latitude</td>
<td>1.14</td>
<td>3.69&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>Constant</td>
<td>-2.99&lt;sup&gt;a&lt;/sup&gt;</td>
<td>-2.91&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>R-squared</td>
<td>.66</td>
<td>.69</td>
</tr>
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</table>

Panel B: First stage regressions for average years of education and cumulative 3<sup>rd</sup> quintile education

<table>
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<th>Property rights: ICRG composite index</th>
<th>Property rights: CIM ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(1)</td>
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<tr>
<td>Primary enrollment, 1920</td>
<td>.079&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.067&lt;sup&gt;a&lt;/sup&gt;</td>
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<tr>
<td>Protestant population, 1970 (%)</td>
<td>1.27&lt;sup&gt;c&lt;/sup&gt;</td>
<td>.292</td>
</tr>
<tr>
<td>Latitude</td>
<td>3.68&lt;sup&gt;a&lt;/sup&gt;</td>
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<td>R-squared</td>
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<td>.57</td>
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<td>Wu-Hausman F (Endogeneity)</td>
<td>p=.004</td>
<td>p&lt;.00</td>
</tr>
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<td>Sargan Chi2 (Over-identification)</td>
<td>p=.010</td>
<td>p=.004</td>
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Standard errors are in parenthesis. a, b, and c denote 1%, 5% and 10% significance level respectively.
### Table 7: System GMM estimates of property rights

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<td></td>
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<td>ICRG composite index</td>
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<td><em>t-5</em></td>
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<td>Cumulative 3rd quintile</td>
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<td>education <em>t-5</em></td>
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<td>Cumulative 3rd quintile</td>
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<td>education <em>t-10</em></td>
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<td>Ln GDP per capita</td>
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<td><em>t</em></td>
<td>3.52^a</td>
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<tr>
<td>Ln GDP per capita</td>
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<td><em>t-5</em></td>
<td>-2.67b</td>
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<td><em>t-10</em></td>
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Robust standard errors are in parenthesis. a, b, and c denote 1%, 5% and 10% significance level respectively.

### VII. Concluding remarks

In spite of growing interest on the empirical manifestations of the broader modernization theory, the link between human capital and property right institutions is little explored. Two reasons could be mentioned for this lack of empirical attention: difficulty of measuring systemic property rights and the overshadowing of human capital...
as an explanatory factor by income. This paper takes on the task of analyzing the impact of human capital on property right institutions by employing a broad-based new index for property rights and by focusing on the joint effects of education and income.

The results confirm that, generally, more education promotes better protection of property rights. But the more interesting aspects do not become apparent until one looks at the non-linearity of the impact of education with respect to the level of education and the level of income. The fact that the advancement to intermediate levels of average schooling does not bring as much return in terms of improving property rights as the lower and upper level transitions triggers curiosity as to whether a medium-institution trap exists or not. The negative marginal effect of increasing schooling without raising income in poor countries finds some anecdotal support in the experience of post-independence African countries. The massive investment in human capital that followed decolonization in most of those countries only created an army of rent-seekers in the absence of economic growth particularly after the end of the commodity boom and the oil shocks in the 1970s (Pritchett, 2001). The results of the dynamic panel data analysis also suggest that a rise in the level of education might not immediately bear a positive impact on property rights. As far as human capital inequality is concerned, it is worth noting that moderate levels of inequality could be tolerable as far as the average years of education are in the right range.

The results presented in this paper are expected to provide exploratory lead in the empirical study of the endogenous generation of economic institutions. They are also intended to motivate further theoretical work on the link between human capital and property right institutions. The measurement of property rights might still prove a contentious issue. The composite index adopted to measure property rights in this paper may be susceptible to error of commission since it is essentially a blanket measurement. But it is relatively free from error of omission that might be prevalent with narrowly defined measures of property rights. As a contribution to further research, the results of the preceding analysis are supposed to motivate more nuanced investigation in the area of endogenous property rights at the same time as they fill in substantial gap in the empirical examination of the modernization theory.
Appendix 1: Variable definition and data source

a. Components of the composite index

Corruption - This is an assessment of corruption within the political system. Although this measure takes political corruption into account, it is more concerned with actual or potential corruption in the form of excessive patronage, nepotism, job reservations, ‘favor-for-favors’, secret party funding, and suspiciously close ties between politics and business. Corruption is measured on a 6-point scale. Source: Political Risk Service (International Country Risk Guide)

Bureaucratic quality - High points are given to countries where the bureaucracy has the strength and expertise to govern without drastic changes in policy or interruptions in government services. In these low-risk countries, the bureaucracy tends to be somewhat autonomous from political pressure and to have an established mechanism for recruitment and training. Countries that lack the cushioning effect of a strong bureaucracy receive low points because a change in government tends to be traumatic in terms of policy formulation and day-to-day administrative functions. Bureaucratic quality is measured on a 4-point scale. Source: Political Risk Service (International Country Risk Guide)

Law and order - Law and Order are assessed separately, with each sub-component comprising zero to three points. The Law sub-component is an assessment of the strength and impartiality of the legal system, while the Order sub-component is an assessment of popular observance of the law. Thus, a country can enjoy a high rating – 3 – in terms of its judicial system, but a low rating – 1 – if it suffers from a very high crime rate or if the law is routinely ignored without effective sanction (for example, widespread illegal strikes). The overall index is measured on a 6-point scale. Source: Political Risk Service (International Country Risk Guide)

b. Other variables

Contract Intensive Money - The ratio of non-currency money to the total money supply, or \((M_2 - C_2)/M_2\), where \(M_2\) is a broad definition of the money supply and \(C\) is currency held outside banks. Source: International Financial Statistics, IMF

Mean years of schooling - Years of schooling of the total population aged over 25. Source: Barro and Lee (2000)
Chapter Two – Does Education Promote Stable Property Rights?

**Shares of quintiles of schooling** - The shares of schooling of the whole population divided in five quintiles calculated based on the Barro and Lee (2000) dataset. *Source: Castello and Domenech (2002)*

**Schooling Gini coefficient** - Gini coefficient calculated for schooling following the standard procedures of calculating income Gini coefficient. *Source: Castello and Domenech (2002)*

**GDP per capita** - Real Gross Domestic Product divided by population (2000 prices) *Source: Heston et al. (2002)*

**Settler mortality** - Log of the mortality rate faced by European settlers at the time of colonization. *Source: Acemoglu et al. (2001)*

**Share of fuel in merchandise exports** - The percentage of gas and oil exports out of total merchandise exports. *Source: World Development Indicators (2009)*

**Legal origin** - An indicator of whether the country’s company or commercial law originated from British Common law. *Source: La Port et al. (1999)*

**Tax revenue to GDP ratio** - Total government revenue from taxes and social security contributions as a percentage of GDP. *Source: Easterly (2001)*

**Executive constraint** - The extent of institutionalized constraints on the decision-making powers of chief executives, whether individuals or collectivities. This variable is measured on a seven-point scale. *Source: Marshall and Jaggers (2002)*

**Ethnic polarization index** - Index of ethnolinguistic polarization calculated using the data of the World Christian Encyclopedia. *Source: Montalvo and Reynal-Querol (2005)*

**Ethnic fractionalization index** - Index of ethnolinguistic fractionalization calculated using the data of the World Christian Encyclopedia. *Source: Montalvo and Reynal-Querol (2005)*


**Rate of primary enrollment 1920** - National primary enrollment ratio in 1920. *Source: Benavot and Riddle (1988)*

**Percentage of protestant population** - Percentage of population identified as following protestant religion. *Source: World Christian Database*
### Appendix 2: Individual components of the property rights index and education: benchmark SUR estimates

<table>
<thead>
<tr>
<th></th>
<th>Corruption</th>
<th>Bureaucratic quality</th>
<th>Law and order</th>
</tr>
</thead>
<tbody>
<tr>
<td>ICRG composite index (t-5)</td>
<td>(0.674^a)</td>
<td>(0.725^a)</td>
<td>(0.712^a)</td>
</tr>
<tr>
<td></td>
<td>(0.029)</td>
<td>(0.026)</td>
<td>(0.030)</td>
</tr>
<tr>
<td>Ln GDP per capita (t-5)</td>
<td>(0.075^c)</td>
<td>(0.131^a)</td>
<td>(0.137^a)</td>
</tr>
<tr>
<td></td>
<td>(0.042)</td>
<td>(0.031)</td>
<td>(0.045)</td>
</tr>
<tr>
<td>Lower middle education (t-5)</td>
<td>(0.177)</td>
<td>(0.172^c)</td>
<td>(0.495^a)</td>
</tr>
<tr>
<td></td>
<td>(0.141)</td>
<td>(0.094)</td>
<td>(0.147)</td>
</tr>
<tr>
<td>Upper middle education (t-5)</td>
<td>(0.131)</td>
<td>(0.233^{b})</td>
<td>(0.445^a)</td>
</tr>
<tr>
<td></td>
<td>(0.147)</td>
<td>(0.101)</td>
<td>(0.155)</td>
</tr>
<tr>
<td>Upper level education (t-5)</td>
<td>(0.633^a)</td>
<td>(0.403^a)</td>
<td>(0.711^a)</td>
</tr>
<tr>
<td></td>
<td>(0.175)</td>
<td>(0.117)</td>
<td>(0.180)</td>
</tr>
<tr>
<td>Constant</td>
<td>(-0.28, -0.34)</td>
<td>(-0.64, -0.54)</td>
<td>(-0.81, -0.56)</td>
</tr>
<tr>
<td></td>
<td>(-0.25, -0.48)</td>
<td>(-0.80, -0.84)</td>
<td>(-0.92, -0.61)</td>
</tr>
<tr>
<td>R-squared</td>
<td>(0.82, 0.76)</td>
<td>(0.87, 0.75)</td>
<td>(0.84, 0.44)</td>
</tr>
<tr>
<td></td>
<td>(0.43, 0.66)</td>
<td>(0.67, 0.93)</td>
<td>(0.70, 0.80)</td>
</tr>
<tr>
<td>N</td>
<td>105, 105</td>
<td>105, 105</td>
<td>105, 105</td>
</tr>
</tbody>
</table>

Standard errors are in parenthesis. \(a, b, and c\) denote 1%, 5% and 10% significance level respectively.
### Appendix 3: Marginal effects of education on the individual components of the property index at different levels of income

<table>
<thead>
<tr>
<th>Income level (country example as of 1995)</th>
<th>Corruption</th>
<th>Bureaucratic quality</th>
<th>Law and order</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>dy/dx: mean years of education</td>
<td>dy/dx: cumulative 3rd quintile education</td>
<td>dy/dx: mean years of education</td>
</tr>
<tr>
<td>1 (Liberia)</td>
<td>-.147(^a) (.046)</td>
<td>-3.390(^a) (.775)</td>
<td>.033 (.034)</td>
</tr>
<tr>
<td>2 (Cameroon)</td>
<td>-.094(^b) (.038)</td>
<td>-2.251(^a) (.644)</td>
<td>.050 (.027)</td>
</tr>
<tr>
<td>3 (Kenya)</td>
<td>-.042 (.032)</td>
<td>-1.112(^c) (.570)</td>
<td>.066(^a) (.023)</td>
</tr>
<tr>
<td>4 (Sri Lanka)</td>
<td>.011 (.030)</td>
<td>.026 (.574)</td>
<td>.083(^a) (.021)</td>
</tr>
<tr>
<td>5 (Malaysia)</td>
<td>.064(^b) (.032)</td>
<td>1.165(^c) (.346)</td>
<td>.100(^a) (.022)</td>
</tr>
<tr>
<td>6 (Kuwait)</td>
<td>.116(^a) (.037)</td>
<td>2.304(^a) (.792)</td>
<td>.133(^a) (.030)</td>
</tr>
</tbody>
</table>

Standard errors are in parenthesis. \(a\), \(b\), and \(c\) denote 1%, 5% and 10% significance level respectively.
Appendix 4: Polynomial smoothing plots of cubic estimation of property rights with respect to schooling Gini coefficient
References


Chapter Two – Does Education Promote Stable Property Rights?


CHAPTER THREE

United We Stand, Divided We Huddle: the Political Economy of Ethnicity and Elite Competition in Kenya

Biniam Bedasso

Abstract

Elite capture and ethnic fragmentation are two of the most pernicious sticking points standing in the way of institutional change and economic development in Africa. Kenya features a post-colonial history replete with the effects of elite persistence and ethnic tensions in spite of a vibrant capitalist economy. This paper aims to examine why ethnic allegiances persisted as the most dominant medium used by the elites to organize collective action in Kenya, prevailing over alternative forms of mobilization such as class. The oft-destabilizing prominence of ethnic fault lines is contrasted with the trans-ethnic cooperation that has underlain the two peaceful presidential transitions the country has seen until 2013. Historically, competitive tribalism is found to have persisted in the face of sizable class cleavages because initial inter-group inequalities have undermined the political salience of rising individual inequality. Moreover, the early institutions of the country were designed in such a way that the stability of the coalition would depend on the elites’ ability to use ethnicity as a bargaining chip to secure their share of the pie. Nevertheless, at the events of the two presidential transitions, ethnic allegiances failed to choke trans-ethnic cooperation because some of the most powerful ethnic organizations themselves were fragmented. Faced with political fragmentation and uncertainty, the elites chose to minimize the risk of intra-elite crisis by resorting to the default option of honoring the rule of law.

Key words: elites, ethnicity, dominant coalition, institutional change, Kenya

JEL classification: P16, D72, O55

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I. Introduction

The political economy origins of Africa’s development challenges have been linked to the adverse influences of unconstrained elites (Ndulu and O’Connell, 1999) and ethnic fragmentation (Easterly and Levine, 1997). The interlocking nature of the two factors – that is, elites rely on ethnic allegiances at the same time as ethnic allegiances are sustained by elite manipulation – have made identifying the primary source of the problem a challenging task. Some of the quantitative empirical evidence in the literature might have picked up the joint effect of unconstrained elites and ethnic fragmentation manifested through endogenous variables measuring institutions (Acemoglu et al. (2001), Rodrik et al. (2004)). That is partly why the success of the few African countries such as Botswana which have been able to sustain economic growth over a long period of time is mostly attributed to good institutions (Acemoglu et al, 2002). The implications of elite capture\(^{19}\) and tribalism for institutional development are more discernible in countries that have experienced significant spells of economic growth as well as stagnation. Kenya fits the bill very well as one such country by virtue of the dramatic shifts in its growth experience coupled with the ups and downs in its political history. The seesaw pattern in the country’s economy and politics is closely tied to the nexus between tribalism and elite persistence.

Kenya was characterized by relative stability and robust economic performance in the early decades after independence. The promise of the early years was curtailed when tumultuous times followed during the 1980s and 1990s. The country entered a phase of democratic transition in 2002, before it swerved back on to the path of chaos and instability after the 2007 elections. Kenyans managed to adopt a new constitution in 2010 in a process that seemed to have brought the whole nation together once again. In this patchwork of instability and resilience that makes up the political economy history of Kenya, two major aspects stand out tall: tribal patronage and elite persistence. This paper seeks to examine why ethnic allegiances persisted as the most dominant medium used by the elites to organize collective action in Kenya instead of alternative forms of mobilization such as class. To this end, first, I focus on the socioeconomic fundamentals that might have caused the persistence of ethnic allegiances in the context of the pre- and post-independence history of the country. Then, I will zoom in on the two peaceful presidential successions in 1978 and 2002 to present a counter-example of circumstances under which ethnic allegiances may fail to chock the emergence of intra-elite rule of law supported by trans-ethnic alliances.

\(^{19}\) Elite capture is defined as the usurpation by the elites of political power and resources that should belong to the broader population according to the de jure social contract.
Kenya was a regional periphery-center in the colonial system of production. Therefore, it had already developed a relatively robust modern sector before independence. The Mau-Mau rebellion forced the colonial administration to nurture a capitalist African elite group with the goal of driving a wedge of class differentiation among the native population. Economic growth performance was strong, albeit fluctuating, in the first two decades after independence. However, patron-client networks continued to be organized along ethnic lines throughout the post-independence history of the nation. The development of capitalistic organizations and the persistence of high income inequality did not give rise to a Marxian class society. Instead, working class Kenyans remained allied to wealthy elites from their respective ethnic groups. Just like in most other African countries that have not attained the level of capitalist development Kenya has, ethnicity continued to be the most viable means of collective action. There is no comprehensive explanation in the literature as to why ethnic ties persist as the basis for organizing patron-client networks while intra-ethnic wealth inequality has been growing.

In spite of a deeply divided political landscape, Kenya managed to pull off a few orderly transitions. The first one of these transitions happened 15 years after independence, at the event of the death of Jomo Kenyatta, the first president of the nation. The country’s constitution stipulated that the Vice President would take office for 90 days in case of the death of an incumbent. However, the then-Vice President Daniel arap Moi did not have the numbers and the affluence in his own ethnic group to help him thwart the public conspiracy orchestrated by elites of other ethnic groups to prevent him from acceding to the presidency. Despite initial challenges, in the end, the constitution was honored and the transition went ahead smoothly. Although the suddenness of the death of Kenyatta might have helped to extinguish subversive conspiracies, the alignment of the basic conditions that facilitated the constitutional power transfer had already been in place. The 1980s were characterized by the rise of a party-state and increasing authoritarianism; whereas the 1990s were marked by a return to multi-partyism albeit continued political instability. But, the 2002 elections saw the exit of the Moi-era elites from government as well as the defeat of Moi’s handpicked heir. In both presidential successions, ethnic allegiances gave way to rule of law at least temporarily. But it remains to be explained as to why the old elites became willing to let go of their power and risk potential reprisal by ethnic others.

I use the Violence and Social Order framework developed by North, Wallis and Weingast (2009, NWW hereafter) to provide an analytic-narrative interpretation of the political economy history of Kenya in the post-independence period. The NWW framework posits that societies develop political order when powerful actors with capacity for violence find it more beneficial to make peace and share the rents that come with the resulting mutual third-party enforcement than to go it alone and gamble...
Institutional change in the long shadow of elites

for a risky gain. Such states are called natural states and the over arching organization of the violence specialists is called the dominant coalition. The equilibrium strategy of the dominant coalition rests on limiting access to political and economic spaces. This prevents the rents which sustain the implicit pact between the specialists of violence from being diluted. The specialists of violence, who normally are patrons of their own clientelist network, use their membership of the dominant coalition to enforce the contractual ties they have with their clients.

The logic of the natural state is employed to shed light specifically on the interaction between ethnicity and clientelism in Kenya in the formative period after independence. This historical discussion motivates a deeper examination of structural and strategic factors that have contributed to the persistence of ethnicity as the foremost basis for mobilizing collective action. I also formulate a simple extension of the NWW framework with a distinction between political and economic elite groups. Ethnic organizations are portrayed as the links that bind political and economic elites together. The extended framework facilitates the analysis of the dynamics inside Kenya's dominant coalition around the time of the two presidential successions. The political transitions themselves were more likely determined by what happened among the political elites. However, the types of coalition structure that emerged after the transitions were shaped by the interaction between the political and economic elites.

In explaining the persistence of ethnic allegiances, the discussion starts off with the more traditional and largely structural factors such as inter-ethnic wealth inequality and relative homogeneity of the ethnic groups. It is shown that the incidence of colonial development and agro-ecological differences favored the Central and Western Highlands. Such geographic differences directly translated into ethnic wealth disparities because the tribes were administratively confined to their regions in colonial times. In the relatively laissez-faire economic setting that the independent government installed, it was to be expected that economic growth would benefit the rich better than the poor. Thus post-independence economic growth failed to weaken ethnic sentiments because the economic gain accrued to some ethnic groups more than to others. Nevertheless, within-group inequality is as important as inter-group inequality. The qualitative evidence demonstrates that the liberal paradigm of the nation state was promoted when an economically differentiated ethnic group controlled political power in Kenya. On the contrary, ethnic-based regionalism was favored when a more homogenous ethnic group took over. The liberalizing effect of heterogeneity is not as strong as the ethnicizing effect of homogeneity.

No matter how important group inequality and relative homogeneity are as factors influencing ethnic allegiances on their own, they are rarely insulated from elite manipulation. As long as the violence specialists see their leadership of ethnic organizations
as their most important bargaining chips, they will strive to preclude other forms of mass mobilization that would undermine their legitimacy as leaders of their clientel network. Kenya's history is replete with political assassinations of powerful actors who had threatened to build viable trans-ethnic alliances. One of the things that multi-party politics takes away from the elites is their ability to regiment the middle class and the poor in different compartments under a single-party system. That would leave ethnicity as the easiest basis for collective action. Kenya's elites responded to the threat multi-party politics posed to their ethnic bargaining chips by preemptively fortifying their tribal enclaves with the help of ethnically homogenous political parties and by inciting violence. One would expect the ethnic leaders to favor more liberal forms of organization such as profession-based networks so long as they benefit more from such configurations than from ethnic organizations. The human capital advantage of Kenya's independence-era elites could have been a viable basis to promote such reconfigurations. However, that particular advantage of the elites was quickly eroded as access to education was extended to non-elites after independence.

Elite fragmentation is usually blamed for political violence in Kenya (Branch and Cheeseman (2008), Muller (2008)). Nevertheless, a different look at the narrative on political transitions in the country's history indicates that the sizable level of fragmentation among political elites around the time of the two presidential successions is to take credit for the peacefulness of the transitions. In both transitions, however, any given form of elite fragmentation would have not been a sufficient condition. Rather, it had to be accompanied by intra-elite differences arising within the single most populous and economically powerful ethnic group (i.e. the Kikuyu). It does not mean ethnic allegiances were completely subdued at the time of the transitions. It only means that the co-ethnic elites themselves were so fragmented that they could not rely on ethnic organizations as their bargaining chips to sustain cooperation within the dominant coalition. Therefore, they had to fashion some sort of intra-elite rule of law, which actually meant enforcing the provisions already existing in the constitution and the electoral laws.

The rest of the paper proceeds as follows. Section two sets the context for the discussion on ethnicity and elite competition by providing a concise characterization of the post-independence history of Kenya using the NWW framework. The first part of section two provides a very brief summary of the logic of the natural state as it is argued in NWW. The second and third parts of section two apply some of the basic tenets of the natural state framework to narrate the history of the country in different periods. Section three focuses on explaining why ethnicity has persisted as a powerful tool to organize political and economic collective action in Kenya. Drawing contrast between persistent tribalism and the occasional occurrence of trans-ethnic cooperation, section four examines how Kenya managed to pull off two orderly presidential
transitions in its post-independence history regardless of ethnic fault lines. To that end, the first part of section four proposes a simple theoretical framework identifying further dimensions of intra-elite competition on top of ethnic allegiances. The second half of the section corroborates the conceptual framework with the narrative of the two presidential successions. Section five concludes.

II. A natural state interpretation of the political economy history of Kenya

a. The logic of the natural state in the violence and social orders framework: brief summary

In an approach that defines institutional change as an outcome of the dynamism in the underlying relationship among elites, NWW have developed an encompassing theory of social orders and their evolution through time. The anchoring idea in this framework is that the so-called natural states (or limited access orders) provide order by using the political system to limit economic entry and create rents. Then the states use the rents to stabilize the political system and contain violence. The theory juxtaposes the natural state social order against the developed open access order. In the case of an open access order, unfettered access to economic and political organizations sustains economic and political competition.

The co-evolution of political and economic systems is an essential feature of the NWW framework. A dominant coalition of elites reigns over society by maintaining a double-balance in the political and economic spheres. The attainment of a double-balance refers to the existence of symmetry between distribution of rents and distribution of political power. The specialists of violence who normally generate political bargaining power form their client organizations come together to build a dominant coalition buttressed by the selective distribution of rents. The dominant coalition in natural states is an adherent organization built on incentive-compatible allocation of rents among elites and sustained without any outside third-party enforcement. Unlike intra-elite relations, the relationship between the elites and their clients take the form of contractual organizations such as patron-client ties. The patron-client contracts are normally enforced by the dominant coalition. The clients feel more confident about their patron’s ability and willingness to deliver when he is “embedded in a larger set of social arrangements where the patron’s ability to enjoy a stream of rents from his or her clients is part of what makes the larger arrangement sustainable” (NWW, pp. 38).
As it would be unrealistic to lump all natural states in a single category, the NWW framework reckons a reasonable level of diversity across the spectrum of natural states. The most rudimentary types of natural states are the fragile natural states which are extremely personalized. Fragile natural states are virtually unable to build any kind of coalition that is capable of containing violence. The second level represents basic natural states which have managed to “sustain a durable and stable organizational structure of the state.” However, most of the organizations have to be closely tied to the dominant coalition in basic natural states, as the institutions are not yet developed enough to support sophisticated private organizations. These types have been common throughout world history. Finally, the most stable types of natural states are the mature natural states which are “characterized by durable institutional structures for the state and the ability to support elite organizations outside the immediate framework of the state.”

The characteristics and basic dynamics of natural states could be summarized in the form of three simple propositions. The first proposition directly follows from the inherent tendency of natural states to use limiting access as a mechanism of stabilization as described above.

**Proposition 1:** Natural states limit access to organizational forms
The second proposition draws on the first proposition and the logic of the double balance. Limiting access to organizational forms should be complemented by controlling trade if the dominant coalition has to maintain the double balance.

**Proposition 2:** All natural states control trade.
The limit imposed on access to organization and the rents generated through controlling trade bestow the elites with distinctive privileges. In order to enforce those privileges and stave off potential conflicts among themselves, the elite formulate a particular legal framework.

**Proposition 3:** The origin of legal system lies in the definition of elite privileges
Although it is not inevitable, natural states could eventually develop and evolve into open access orders. NWW reviewed a long spell of economic history in the western world to show that the transition to open access was anything but teleological. There is no single path that societies could follow to transform themselves through different stages of natural state and then to an open access order. However, the framework identifies three doorstep conditions for the transition to open access orders that would boil down to impersonalizing intra-elite relationships and opening access to organizations for non-elites at a later stage. Those conditions are: 1. Rule of law for elites; 2. Perpetually lived forms of public and private elite organizations, including the state itself and; 3. Consolidated political control of the military.
The emphasis on the rule of law for elites as the first doorstep condition implies that there is some level of heterogeneity among elites. The fulfillment of that particular condition depends on how different interests play out within the elite circle. However, the NWW framework does not make explicit distinction between different types of elites. In order to handle this issue, I will take the original framework one step further and distinguish between political and economic elites in section five of this paper.

b. The birth of a basic natural state

At independence, the new political elites of Kenya did not find it incredibly difficult to forge a state that would emerge as a strong and viable organization capable of making up the centerpiece of the dominant coalition. The colonial state had already mastered wielding the tools of economic coercion such as labor repression that it applied to facilitate settler accumulation (Swainson, 1978). It took the Mau-Mau rebellion for the colonial state to try its hands on large scale political and military coercion. The military was composed of the “the King’s African Rifles, a small but compact military force nurtured on the British tradition of subordinating the military to the government” (Tamarkin, 1978, pp. 300). But the British tradition and the relatively small size of the army did not provide sufficient guarantee for the new elites to ensure its subordination. After establishing his government, Kenyatta acted immediately on raising the Kikuyu representation (i.e. his own tribe) in the army to 23 percent as opposed to earlier near-exclusivity to Akamaba and Kalenjin tribes (Harris, 1996). He also created the General Service Unit (GSU), a paramilitary force, which has become ever since an elite unit loyal to the presidency. Therefore, the post-independent Kenyan government inherited the foundations of a basic natural state from the colonial system. Cheeseman (2006) summarizes the pre-independence influence on the construction of a limited access order as follows:

“In part, the impetus to regulate political space so tightly came from Kenya’s white settlers, who made the first breakthrough in creating new arenas of political space, and subsequently set about defending their right to access these arenas exclusively” (pp. 12)

As of the early 1960s, Kenyatta’s way of coalition formation could be described as a tri-pronged strategy of cooption, appeasement and continuity. The cooption strategy was applied to make members of the only opposition party (i.e. Kenya African Democratic Union (KADU)) cross the isle and join Kenyatta’s ruling party (i.e. Kenya African National Union (KANU)). Kenyatta is normally depicted as a charismatic leader who had earned reverence in all corners of Kenya’s society. But he himself had realized that he did not really live up to that image when he struggled to unify his own Kikuyu tribe
during his chairmanship of the Kenya African Union from 1947 to 1952 (Tamarkin, 1978, pp. 298). Therefore, he did not waste time before he launched an aggressive strategy of cooption buttressed by promises for cabinet positions in his new government. Accordingly influential politicians representing smaller tribes that did not necessarily benefit from the cross-regional land redistribution were co-opted.

The appeasement strategy was directed towards ex-Mau-Mau rebels hailing mainly from Kenyatta’s own tribe. These people had been excluded from the transition process and more specifically from the pre-independence Lancaster House negotiations with the British government. When the emergency was lifted and when they rejoined the society, the rebels found out that most of their ancestral land in Central Province had already changed hands from white settlers to ‘collaborator’ elites from their own Kikuyu tribe (Branch, 2006). That is why it became incumbent upon Kenyatta to appease these disenchanted contingents within his most important power base, the Kikuyu ethnic group. At the heart of this strategy was resettling the ex-rebels in the land-rich Rift valley province.

The third strategy of maintaining the status quo is also part of a conscious decision taken by the Kenyatta government to stabilize the new coalition. Probably the most powerful symbol of continuity is the appointment of Bruce Mackenzie, a settler farmer, to serve as the Minister of Agriculture for the first eight years of the independence era (Leys, 1975, pp. 65). The commitment to continuity is also demonstrated in the engagement of the British in training and advising the military establishment. The last British advisor to the army left only in 1975 (Tamarkin, 1978, pp. 300). On the economic front, the Kenyatta government asserted its intention to ensure continuity by ruling out any deviations from a capitalist mode of economic organization.

Once the dominant coalition was stabilized on a multi-ethnic foundation cemented by relatively abundant patronage resources, the most powerful elites (Kenyatta’s inner-circle) were sufficiently emboldened to begin using coercive measures to weed out ‘subversive’ elements threatening the stability of the coalition. The first most significant act of political coercion was directed toward a leftist offshoot of KANU who formed a new party in 1966 under the name Kenya Peoples Union (KPU). After tumultuous three years, KPU was banned and its leadership detained well ahead of the 1970 election (Kanyinga, 2007, pp. 87). Some of the violent acts of coercion, however, were not without consequence to the long-term stability of the dominant coalition. For instance, the assassination of Tom Mboya, who hailed from the Luo ethnic group and had risen to become the second most powerful personality in the KANU power structure, revealed the subtle fragility of the young coalition (Throup (1987), pp. 51).
The economic foundations of the basic natural state of early independent Kenya can be summarized in synchronization with the three major propositions in the natural state theory of NWW. The first proposition claims all natural states limit access to organizational forms. Since the most important asset in economic life in Kenya is land, some of the most important economic organizations were the land buying companies. Those companies pooled resources and secured loans for group purchase of land in high-density settlement areas. In most of the cases, the land buying companies, such as the powerful Ngwataniro Corporation, were headed by ethnic leaders who could gain access to land and finances by virtue of their political position within the dominant coalition. Such patrons could also restrict access to their clients only. Ethnic leaders were also influential in limiting access to tribe-based investment companies such as the Gikuyu, Embu, Meru Association (GEMA) and the Luo Thrift Union. Capital markets were systematically restricted, first, by the informal networks of institutional investors that had emerged from the colonial system, and then by governmental institutions such as the Capital Issue Committee (Ngugi, 2003).

The second proposition states that all natural states control trade. The tendency of the post-independence dominant coalition to control trade is marked by the enactment of the Africanisation drive. The drive was embodied in the Trade Licensing Act (1967) and the Import, Export and Essential Supplies Act (1967) that promulgated the government's commitment to reserve certain areas of trade for Kenyan citizens (Himbara, 1994, pp. 472). The actual intention of the de facto policy action in the Africanisation campaign became apparent as some Asian-Kenyans were forced to quit their businesses in contradiction with the de jure provisions that had made the delineation of indigenization on the basis of citizenship, not race (Swainson, 1977, pp. 43). Generally, the interventionist nature of the government has been signified by the large number of statutory bodies it runs and cooperatives it controls indirectly.

The third proposition of the NWW framework remarks that the origin of legal systems lies in the definition of elite privileges. The manifestation of this proposition in the founding structure of independent Kenya could not be more visible than in the land law system. As Kenya emerged from colonization, the elites found themselves possessing more land than the average citizen. Therefore, they instituted a legal system protecting private property in land. Doing so, they formally defined their privilege for freehold on land that had been governed by customary law in pre-colonial times. However, these privileges have not been converted into rights. Apparently, elites had to

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21. Gikuyu refers to Kikuyu
be shielded by their membership in the dominant coalition to avoid expropriation of their land particularly in tumultuous times such as the 1990s (Onoma, 2010).

c. **Coming of age: the evolution of Kenya’s natural state**

By the time Kenya entered the second decade of independence, the era of constitutional politics was over, and the ethnic base of the dominant coalition had shifted further to the Kikuyu elite (See Appendix 1 for a tabular summary of the history of Kenya’s dominant coalition). Following suit on colonial tradition, the independence government had structured the day to day administration of the country to be carried out by provincial commissioners who reported directly to the president. KANU, which had always been a loose collection of regional patrons, was cut out of the policy making circuit (Barkan, 1994, pp. 10). To make up for the legitimacy that a strong party system based on ideological foundations could have provided, the regime devised a system of relatively robust internal democracy at parliament level. The high-politics of parliament was interlinked with a battery of self-help associations, *Harambees*, configured to ensure that parliamentarians delivered patronage resources to the grassroots (Orvis, 2006, pp. 102). In the process, Kenyatta achieved the status of such an invincible anchor of stability that the extralegal enforcement which is required to resolve intra-elite conflict in basic natural states used to come from him.

![Graph showing year-to-year change in budgetary rent seeking out of total government expenditure.](image)

**Fig. 1:** The year-to-year change in budgetary rent seeking out of total government expenditure

*Source:* Computed based on data from Economic Survey, various issues (Gov. of Kenya)
The double balance that should be achieved by limiting entry to both political and economic spaces was effectively maintained for much of Kenyatta’s reign because political power coincided with the economic clout of the tribes of the Central Province. First it was essential to afford the political elites a certain level of economic head-start through early land allocations. Then it was possible to shift to more subtle mechanisms of dispensing patronage resources that would effectively limit access via requirements of threshold capital. Hence, most of the rent in the 1970s was distributed using budgetary means in the form of loans to parastatals, subsidies, and purchase of equity in private enterprises. Fig. 1 displays the substantially high, albeit volatile, ratio of budgetary rent seeking in the 1960s and 1970s. The ratio depicted in fig. 1 basically measures the year-to-year change in the allocation of the national budget to parastatal loans, subsidies and purchase of equity. A sizable portion of this allocation accrues to parastatals or private enterprises controlled by the ruling elites. The absolute values of the change in budgetary rent seeking declined substantially after fiscal strains showed up toward the end of the 1977 coffee boom.

Kenyatta allowed the civil service and the judiciary to exercise relative autonomy, although he had always made sure that they would not grow into independent centers of power (Barkan, 1994, pp.17). The regime also presided over the growth of many other forms of organizations. Some unions such as the Kenya Association of Manufacturers were bold enough, at times, to openly contradict government policy and lobby for its reversal. The state allowed the flourishing of ethnic associations with dual interest in social welfare and business ventures. One of these associations, GEMA, came close enough to supplanting the overly-weakened KANU by mobilizing millions of members and maintaining the discipline of holding regular internal elections, which were both conspicuously absent in the later. GEMA’s leadership consisted of top government officials and some of the wealthiest individuals in Kenya. Apparently, they operated with the tacit blessing of Kenyatta.

GEMA’s run as a shadow political party reached a climax in 1976 when its leaders orchestrated an extensive campaign to get the constitution changed in order to bar vice president Daniel arap Moi from succeeding the presidency in case the incumbent died.

22. The ratio of budgetary rent seeking is computed following Katz and Rosenberg (1989). The formula for calculating the ratio is give as
\[ R_i = \frac{1}{2} \sum_{i=1}^{n} S(t,i) - S(t-1,i) \], where \( S(t,i) \) and \( S(t-1,i) \) are the proportions of the budget going to purpose \( i \) in years \( t \) and \( t-1 \) respectively, the number \( n \) is equal to the number of categories in the budget, and the division by 2 is done to avoid double counting.


in office. The audacity of this attempt, organized by a tribally exclusive group which was part of the dominant coalition, might give the impression that the real center of power was being fragmented between the state and a splinter group: a quintessential sign of a fragile natural state. But the key aspect differentiating this trend from typical fragility lies in the very object that the elites chose to challenge each other about, namely the constitution. It was also by making specific reference to the constitution that the elite group defending the status quo rebuffed “the change the constitution” movement. Accordingly, with de jure support acquired through the constitution and de facto ruling passed by Kenyatta, the intra-elite conflict was resolved and Daniel arap Moi succeeded Kenyatta in the eventuality of the latter’s death. Section 4 will specifically focus on the dynamics surrounding Kenyatta’s succession.

The first major adjustment that the dominant coalition in Kenya had to go through came in the form of Moi’s accession to the presidency. Moi had quickly made an overtly public commitment to members of the dominant coalition by declaring ‘Nyayo’ (footsteps) as his official motto. In the absence of a strong and autonomous party, Moi did not have any choice but to reach out for a haphazard system of Harambee associations which had essentially represented the quasi-formal vetting mechanism of a single party electoral system. But he also moved steadfastly on reviving the party as the new center of power. Although he was obviously cognizant of the confrontation he had faced from the Kikuyu elites in the “change the constitution” campaign, he could never afford to exclude the Kikuyu from the beginning. That is why he tried “to drive a wedge between Kenyatta’s political bailiwick in Kiambu (a Kikuyu sub-region) and the other Kikuyu districts” (Throup, 1987, pp. 35).

Moi’s worst enemy, though, did not come from any particular segment of the dominant coalition or a non-elite group. The scourge of Moi’s new government was unleashed by the economy. The macroeconomic health of the economy had already been disturbed since after the first oil shock. As soon as things seemed to get back to normal with gains from the coffee boom, the windfall was squandered leading to further inflation (Ndulu and Mwega, 1994, pp. 112). The economic squeeze could not have come at a worse time for Moi. As it is, economic contractions always endanger the stability of a natural state coalition. In Moi’s case, the contraction happened in his first year in office when he needed to consolidate his sphere of influence in the dominant coalition by integrating his less endowed Rift Valley allies into the patronage system. To make

25. GEMA was actually referred to as the ‘Kiambu mafia’ in Katumanga and Omosa (2007, pp. 68). Kiambu is the district in Kikuyuland where most of the GEMA leadership hailed from.
26. Moi was clearly trying to appease the elites of Central Province before he undertook to divide them. “Harambee (contributions) from the president and senior officials to Central Province reached an all-time high, with the province taking 84.8 percent of all contributions made that year” Widner (1992, pp. 128)
In 1982, the Moi government rammed through parliament a constitutional amendment that turned Kenya into a de jure one-party state. Doing so, they were trying to preempt the rise of rival factions within the dominant coalition that would have essentially undermined the government’s position as the core of the coalition. The last threat that triggered the constitutional amendment unfolded when the remaining Luo elites decided to break away from KANU to join a new party that would have been formed by Oginga Odinga. Given the organizational importance ethnic leaders had in the dominant coalition, the consolidation of the two biggest ethnic groups into quasi-independent centers of power would have challenged the government’s sphere of influence seriously. Effectively, the regime readjusted the intra-elite rules of the game to its de facto capacity before the existing rules would have threatened its position. The abortive coup d’etat of August 1, 1982 was only a culmination of a long standing fracturing and a curtain call of a relatively open basic natural state.

Direct access to organizations to the rival Kikuyu elite was eventually closed off. GEMA was pressured to wind up. The most prominent professional organization, Union of Kenya Civil Servants, which was dominated by the old elites was ordered to de-register. In 1985, the Kenya Farmers Association was shut down and replaced by the Kenya Grain Growers Cooperative Union. This last move was intended to reduce the influence of wealthy Kikuyu farmers (Barkan, 1994, pp. 26). The government also tightened its grips on the judiciary. It is no accident that the spell of economic recovery in the second half of the 1980s coincided with the revival of demands for a multi-party system. The recovery, which is mainly attributed to the mini-coffee boom in 1986, had brought sufficient windfalls to the coffee growers of Central Province. Although there were no official avenues left to support electoral candidates of one’s choice, the wealthy farmers could use their money to secretly finance underground opposition. But the main thrust in support of multi party politics emanated from outside when international donors forced the cash-strapped Moi administration to the negotiating table. Moi conceded grudgingly to repel section 2A of the constitution that had stipulated a single party system, and to re-introduce multi-party elections. Nevertheless,
his narrow sub-coalition, apparently, vowed to shift the fight from the high-politics of Nairobi’s elites to the low-politics of the rural areas. Outright violence was used to gerrymander and suppress opposition votes in a trademark move of a threatened coalition of patrons resorting to attacking the co-ethnic clients of their rival patrons.

Susan Mueller (2008) argues that Kenya has carried a legacy of weak institutions, diffused violence and non-programmatic political parties over into the new century. She also points out that many of those aspects are the products of the 1990s. Daniel Branch and Nic Cheeseman (2008) remarked that Kenya was subject to elite fragmentation and state informalization as it was undergoing political liberalization. Both sets of authors attribute the widespread violence after the 2007 elections to the respective factors mentioned above. But they failed to put the basic conditions that led to the post-election violence in 2007 in perspective with the underlying dynamics that had resulted in the peaceful transfer of power only five years earlier in 2002. By focusing only on the crisis in 2007, the literature gives the impression that the peaceful transition in 2002 had not happened. The question remains though, why did a dominant coalition that had managed to oversee a constructive adjustment only one election-term earlier fail miserably to hold itself together in the run up to the next election?

On top of all the above factors that augur fragility, there was, at the same time, a bundle of political economic aspects that might have contributed to maturity of the natural state. Although it is characterized by high inequality, Kenya has always had a substantial middle class and a growing service sector. “Ever since independence, Kenya, unlike most other African countries, has allowed strong nongovernmental sector to exist” (Hyden, 1994, pp. 92). The residual social capital carried over from the days when ethnic welfare associations were popular might have also facilitated mass mobilization. The churches in Kenya are outspoken critics on social and political problems. In a stark demonstration of the power of the civil society in the 1990s, a nationwide forum of constitutional reform was instituted under the name of Ufungamano to fully detach the review process from the influence of the state (Kanyinga, 2007, pp. 95).

With the backdrop of a mosaic of fragility and maturity, an elite consensus was achieved in 2002 brokered by a supposedly self-enforcing power sharing agreement for the new elites in government and a clean leave exit strategy for the old guard. The inter-election period between 2002 and 2007 saw the dishonoring of the power sharing agreement and the stalling of the constitutional review process. The occurrence of these adverse developments had revealed to the elites that, in the absence of durable institutions, they could not rely on the legal enforcement of intra-elite agreements. The collapse of the dominant coalition was inevitably followed by violence.
Chapter Three – United We Stand, Divided We Huddle

One interpretation of the events of the first decade of the 2000s is as follows: the parameter space for defining the country’s position on the fragile-basic-mature natural state spectrum has become narrower. This implies that it is not only a country’s position on the scale of natural state development that varies; the configuration of the scale itself could be a function of a host of country and time specific factors. Kenya is susceptible to several fault lines that could pave the road to fragility. But it also has a number of active enclaves of maturity as well as a potential for civic engagement that was deactivated only due to the repression in the 1980s. Therefore, with the shadows of fragility and maturity lingering in the horizon all at the same time, the actual equilibrium is mainly determined by the credibility of the intra-elite enforcement mechanisms and the level of centralized control of violence.

III. Ethnicity, Modernization and Patron-Client Networks

Organizations are the backbone of limited access orders. The stability of natural state social orders hinges on the capacity of violence specialists to organize their clients. The ease of access to alternative forms of organization is what determines the maturity of natural states. In ethnically stratified societies, ethnic grouping can be an appealing medium to organize a network of patrons and clients. Antedating the occurrence of any sort of economic or social bonds, ethnic bonds are already there for the specialists of violence to exploit as the basis to form organizations. In many societies, there are multiple tiers of sub-ethnic divisions such as clans, sub-clans and families. The boundaries of ethnic delineation could be fluid to the extent that adjoining communities might identify themselves as the same or different ethnic group at different points in time. Sub-ethnic divisions may also morph into solid boundaries depending on the cultural and socioeconomic distance between the sub-groups. Such dynamics could be endogenous to external changes of broader scale as well as to the preferences of powerful actors.

In an autarkic setting, the ethnic groups are self-sustaining socioeconomic structures fitted with their own set of patron-client networks. In that case, the ethnic boundaries define the adherent organizations of sub-ethnic patrons, ensuring the third-party enforcement of intra-ethnic contractual ties. Nevertheless, different ethnic groups often converge on the same political-economic space, mostly in the form of a nation state. Such amalgamation could potentially put different ethnic leaders with viable capacity for violence on a collision course. In order to maintain the stability of the
union, a dominant coalition of ethnic leaders needs to be formed. In the process, the co-ethnic leaders compete for a more prominent place in the larger dominant coalition. They also try to secure a bigger share out of the ‘national’ pool of resources for their clients in exchange for their support. The dominant coalition at a national level emerges as a mechanism to support the sub-ethnic ‘contractual organizations’ of patron-client ties and to stave off potential violence among the ethnic leaders themselves.

Not all ethnic groups are the same in terms of their internal hierarchy and in how such cultural structures are aligned with corresponding socioeconomic contracts. In tightly knit communities with elaborate power structures enforced by traditional sanctions, patron-client ties could be self-enforcing. On the contrary, in communities where the vertical and horizontal boundaries of traditional power and group membership, respectively, are more fluid, the dominant coalition could be instrumental in stabilizing intra-ethnic contractual organizations. But, as long as contractual organizations are organized along communal lines, ethnic allegiances might provide a fail-safe arrangement irrespective of the stability of the dominant coalition. This is true particularly when the social-distance between ethnic groups is substantial.

Whenever patrons realize that they could enforce contractual relationships within their own cliental network by using the alternative mechanism of invoking ethnic allegiances, they tend to have weaker incentives to stabilize the dominant coalition than in the absence of strong ethnic allegiances. This, of course, depends on how distinct the ethnic groups are and how easy it would be for the clients to pass for another ethnic identity whenever they find it more beneficial to regroup under a different patron. As long as the dominant coalition is already stable, strong ethnic allegiances might not hinder the emergence of new interests and the corresponding reconfiguration of patron-client ties. But, generally, ethnic allegiances may lead to frequent violence by increasing the ‘reservation utility’ of the elites in case of dominant coalition breakdown.

Wallis (2011) argues that agents may develop preference for impersonal rules over relation-based organizations when the balance between organization-specific rents and individual-specific rents shifts away from organization-specific rents. Organization-specific rents are the type of privileged benefits that are tied to membership of a

32. Lemarchand (1972) provides extensive review different types of traditional dependency relationships with ethnicity as an independent variable.

33. Caselli and Coleman II (2006) formulate a framework that shows, in a contest for public resources, agents organize in groups that would insure sufficient exclusion, ex-post, of the losing side in the interest of preserving the rents for as few people as possible. Ethnic cleavages that are underlined by physical difference such as color of skin and linguistic differences could be ideal to guarantee such exclusion.
particular organization. On the contrary, individual-specific rents are rents that are tied to the personal quality and skills of individual elites, accruing across the dominant coalition regardless of specific organizations. One of the most appealing organization-specific rents that ethnic leaders could generate from their ethnic network comes in the form of lower downside risk when resources are scarce and violence looms. The relevance of this class of rents diminishes when times are good. Hence the elites could capitalize on their individual-specific rents to start a virtuous cycle of reconfigurations that could eventually lead to opening of access. The following subsection presents theoretical perspectives on how economic growth and class stratifications within ethnic groups could change forms of allegiances. I also discuss under what conditions modernization and growing inequality could fail to alter forms of allegiances.

a. Identity and development

The foregoing discussion suggests that, in a growing economy, elites might see opportunities to exploit their individual-specific rents. Hence, they seek more stable rules that would guarantee those rents irrespective of their affiliation being tied to their ethnic group. However, the quest to exploit those individual-specific rents might not necessarily lead to open access. In the short-run, it could simply lead to regrouping of cliental networks according to complementary individual-specific rents. That way, the old individual-specific rents will be instrumental to create new and bigger organization-specific rents. The new organizations are less likely to be based on ethnic allegiances since complementary individual-specific skills are more likely to be distributed across ethnic cleavages. A boost in trading activities, for example, could lead a tribal leader with good commercial acumen to identify himself more with members of his Chamber of Commerce than with his co-tribesmen (at least as far as public policy issues are concerned). This argument echoes the early modernization theories which claim technological and economic development will midwife a new set of socioeconomic roles and group identities (Fried 1967, Fox 1971). Scott (1972) provides evidence from Southeast Asia confirming that the commercialization of the economy and expansion of markets enhanced the value of cooperative arrangements among non-kin.

The other type of group identification that comes along with capitalist development is class differentiation. The supremacy of ethnic grouping does normally imply the compartmentalization of the working class and peasants in their own ethnic enclaves. McAll (1990) alludes to the Marxian literature which predicts that urbanization and industrial development would bring the working class together spatially. The new spatial proximity results in class awareness, which in turn, according to Max Weber, leads to class struggle. This will essentially solidify the new set of identities along class lines. If intra-ethnic
wealth inequality is rising across the board, it provides a fertile ground for the development of class divisions that could eventually dominate ethnic cleavages.

So why did the advent of capitalism in many multi-ethnic societies fail to relegate ethnic identity to the backseat? Basically, affective ties, once they have formed, are difficult to morph to other forms of association based only on the rational choice of individual group members. Horowitz (1985) summarizes plenty of experimental evidence that show individuals with some sense of loyalty to their group are willing to incur costs to maximize intergroup differentials. Melson and Wolpe (1970) claim that modernization could further intensify communal tensions instead of reshaping group allegiances. The process of social mobilization that normally accompanies modernization creates new competition for scarce resources. This competition enhances long-standing communal antagonisms before the development process gets the chance to neutralize the cleavages. Often, the rate of social mobilization is asymmetric across societies, leading to further grievances. Bates (1974) highlights the fact that both the distribution of modernity and ethnic groups tend to be governed by the factor of space. “Where modernization takes place often largely determines who gets modernized” (Bates, 1974, pp. 464).

Growing intra-ethnic inequality also may fail to alter communal allegiances. The class consciousness that might emerge within ethnic groups due to capitalist development could be preempted by the already existing customary channels of redistribution. No matter how unequal the incidence of benefits may be among co-ethnics, the collective advantage of extracting goods and services from the modern sector as a cohesive group contributes to the persistence of ethnic identification (Bates, 1974). Drawing on evidence from African societies, Miller (1974) argues that kinship plays a vital social welfare function in communally stratified societies as most of them do not have the resources necessary to emulate the modern welfare state.

It is natural to assume that a multi-ethnic society should first develop a viable national identity before it becomes feasible for its members to regroup themselves along trans-ethnic lines such as class or professional affiliation. Penn (2008) develops a formal model that explains the various conditions under which more or less people could identify with the nation state as opposed to their own ethnic groups. Two of the propositions derived from her model capture much of the substantive ideas reflected in the heuristic arguments summarized in the previous paragraphs:

*Relative homogeneity:* “Individuals will be more likely to identify with their ethnic group as it becomes more homogenous, and as its rival groups become less homogenous (with homogeneity defined in terms of variance).” (pp. 962)
Economic growth and the effect of horizontal inequality: “When groups are not too
dissimilar in wealth then a uniform increase in national wealth decreases the like-
lihood that members of all groups will identify ethnically. When groups are very
dissimilar then the effect of increasing national wealth is ambiguous.” (pp. 963)

The setup in Penn (2008) does not take account of the disproportionate influence some
members of ethnic groups (i.e. the elites) might have in determining collective choices
of identity. The factors that are identified in the above propositions to be influencing
identity choice are structural, at least in the short-run. It is very likely that, on top of
such structural factors, strategic decisions taken by elites could affect identity forma-
tion. The theoretical perspectives drawn from Melson and Wolpe (1970) and Miller
(1974), along with conjectures extrapolated from the notion of organization-specific
vs. individual-specific rents of Wallis (2011), will make ground for analyzing strategic
actions by elites. The following subsection employs the foregoing analytical arguments
to assess the persistence of ethnic allegiances in post-independence Kenya.

b. Blood is thicker than water: persistence of ethnic allegiances in
Kenya

Ethnicity is an inherently comparative concept. The “us” in ethnic allegiance is always
defined against a certain group of “others”. Ethnic grouping will not stand as a firm
scaffolding until it is framed as a contrast between groups defined by some other socio-
economic or geographic characteristics on top of the biological or presumed sense of
shared origin. In other words, ethnic identity does rarely emerge as a politically salient
feature until the supposedly-distinct groups converge on a course of competition for
a particular resource. In pre-colonial Kenya, where population pressure was not an
issue and the village homestead was characterized by a Robinson-Crusoe type econ-
omy, “people lived ethnicity rather than rationalized it, having little need to defend its
ways against outside oppression” (Lonsdale, 2004, pp. 77)34. Nevertheless, there was
already a discernible degree of variation in cross-communal relations across different
geographic regions. For example, the scramble for land and consequent tribal raids
that used to happen between the Kikuyu and the Massai near the center of the country
even before the Brits arrived indicates that competitive tribalism is not necessarily of

34. Lonsdale (2004) tries to assert the trans-ethnic nature of social organization in pre-colonial Kenya
by enumerating cases of inter-ethnic migration in search of better protection, inter-marriage and clientage
at times of famine. But one needs to be cautious before concluding that pre-colonial communities were
less tribal than today’s. It is also likely that the undeveloped infrastructure and transport facilities of pre-
colonial Kenya had essentially confined the interaction of communities to be between groups who had
already developed a sense of common identity.
Institutional change in the long shadow of elites

Moreover, the level of organization and traditional hierarchy within ethnic groups also varied substantially. The fact that the British established the foundations for ‘indirect-rule’ in the central province is partly attributed to the organizational capacity some Kikuyu chiefs had developed in controlling their immediate neighborhoods.

The formation of African ‘reserves’ in 1915 is one of the most important landmarks in the installation of ethnicity as the primary basis of political organization in Kenya. The colonial administration decided to slice the native reserves into a series of tribally homogenous units. It then introduced a form of identification (i.e. kipande) that would identify every African male with a particular reserve. Given this administrative structure, ethnic identity emerged as the only means of mobilizing collective action. Accordingly, the first two African organizations formed in 1922 to lobby for native interests, namely the Young Kikuyu Association and the Young Kavirondo Association, were ethnic-based (Nyangira, 1987). However, the two organizations could not be considered to have arisen out of the sense of competitive tribalism. Rather, they were motivated by the common cause of native empowerment against colonial subjugation. They emerged as two separate organizations only due to the administrative constraint imposed by the colonial government. As a matter of fact, it was Harry Thuku, the very person who founded the Young Kikuyu Association, who traveled to Kisumu to persuade “a small number of mission educated Luos to form the Young Kavirondo Association” (Miller and Yeager, 1994, pp. 20).

The colonial administration handled the ethnic associations cautiously, allowing them limited leverage and banning them when necessary. The pressure for more native rights was intensifying regardless. As the Second World War loomed to divert the resources and attention of the colonial administration, all tribal associations were banned. This was intended to preemptively stave off native pressure, reducing African mobilization further to the level of Local Native Councils (Wrong, 2009). At the same time, the administration was engaged in some form of ethnic reengineering as in the case of the Luhya of Western Province, whose collective identity was minted out of nine linguistically close tribes. That was done mainly in the interest of administrative convenience.

The continued confinement of political mobilization to ethnic associations and the concomitant manipulation by the colonial administration gave rise to an endogenous process in which new forms of ethnic identity emerged through amalgamation.

35. After four decades, Moi applied a similar measure of preemptively disbanding ethnic associations ahead of potential resistance. With the consolidation of ethnic organizations in the institutional mold of Kenya, such associations had become the first targets for regimes aiming to defuse collective action against them.
A prime example in this regard is the creation of the “Kalenjin” ethnic group out of numerous Nandi-speaking subgroups towards the mid-twentieth century. The Kalenjin identity is a result of a conscious attempt by the local notables to garner greater bargaining power in an increasingly ethnicised world (Lynch, 2011). Once the dominant coalition was strongly rooted on ethnic grounds, the Nandi-speaking elites had no illusion that their position in the national political space would be enhanced by a larger ethnic base.

The Kenya African Union (KAU), established after the end of the Second World War, was the first pan-ethnic organization with substantial mass mobilization that was able to attain membership of 150,000 strong by 1950 (Miller and Yeager, 1994). The organization's founding leaders were dispassionate liberals with little ethnic-based following. However, as the political reality demanded more communally oriented leaders with populist appeal, KAU grew into an overwhelmingly Kikuyu-dominated organization with little mass presence outside the Central Province (Hornsby, 2012). The key rallying point of the KAU was the return of "stolen lands," an issue that was not as pressing for other groups farther from the ‘White highlands’ as it was for the Kikuyu. The geographic variation in colonial economic practices, particularly with respect to land, had essentially differentiated the causes of grievance of the native population in different parts of the country. This trend had made it inevitable that different ethnic groups would rise up with divergent key demands that would eventually push them to their respective enclaves for political mobilization.

By the time independence was on the horizon, the salience of ethnicity in Kenyan politics was quite evident. But the society had also undergone some level of differentiation along class lines. Of course, settler colonial policies were used to actively discourage African accumulation by reserving export crop production to white settlers. Nevertheless, the effect of the Great Depression necessitated the sourcing of African export crops and native economic mobilization in an effort to increase tax collection. This development opened doors to the rise of an African middle-class situated inside the native reserves and venturing into various fields of commerce. The peculiar nature of Kenya as a colonial ‘periphery center’ networked with the outposts of Tanganyika and Uganda contributed to enhance the incubation of the middle class (Leys, 1975). The relatively advanced industrialization and extensive commercialization of the economy, especially after the Second World War, held some residual effect on the expansion of an African business class.

The Mau Mau rebellion and the resulting emergency dealt a blow to the natural growth of the African middle class. On the contrary, it opened up alternative avenues for the development of patrimonial-leaning elite propped up by direct patronage from the colonial state. With the sealing off of the central highlands due to the emergency, “the
number of registered African companies dropped from 15 percent of Kenya’s total in 1952 to 2 percent in 1953 and then to zero in 1954 and 1955” (Miller and Yeager, 1994, pp. 27-8). The insurgency forced the administration to recruit a loyalist self-defense force in Central Province, the Kikuyu 'Home Guard', numbering close to 25,000 men by 1954. By institutionalizing the advancement of the loyalist elites and manipulating the early land reform program to the benefit of that particular group, the colonial administration intended to intensify the process of class formation and therefore dismantle the broader social foundations of the Mau-Mau. The end of the emergency saw resurgence of economic activity with increased marketed production from smallholder cash crop farmers. At independence a distinct class of African petty bourgeoisie was stacked against the peasant and working class. The European industrial capitalist, the European capitalist farmers, and the Asian commercial bourgeoisie constituted the remaining part of the society (Leonard, 1984).

Independent Kenya emerged as an avowedly capitalist state championing managed state intervention interwoven with promotion of private enterprise. By the time the leading policy framework was articulated in 1965, a substantial number of African elites had accumulated so much wealth as to make them harbor vested interest in the stability of the capitalist system. The way accumulation was fostered in the first decade after independence has effectively hardwired the reproduction of inequality in the young nation. The two major resources that the new African elites had at their disposal were land and salaried employment. On the one hand, after acquiring large tracts of land, one would need to mobilize financial capital through loans in order to develop large-scale commercial farms. On the other hand, wage employment was the only viable collateral and indicator of credit worthiness. It is mostly after adding a well developed farm to their portfolios that people could get access to other loan facilities to embark on other businesses. The practice of providing credit based on landownership worsened the existing inequality and contributed to the predominance of the same group of elites in the political power structure for a long time (Leys, 1975, pp. 99).

36. Contrast this numbers with the 220,000 Kikuyu squatters in 1948, consisting of nearly a quarter of the Kikuyu population, and it would paint a vivid picture of how differentiated and even polarized the Kikuyu community was before independence.

37. This East African (petty bourgeoisie) had three different economic bases – Kulak (or petty-capitalist) agriculture, small trade, and clerical employment – with no necessary economic connection and hence no material reason why they must produce a single class (Leonard, 1984, pp. 144).

38. The title of the policy paper that effectively enshrined the ideological position of the new elite, “the Sessional Paper on African Socialism”, is no more than an oxymoron, since the corner stone of Kenya’s public policy was stated to be giving growth priority over redistribution in the document itself.
The official policy of Africanization was also used to create a new class of African business and bureaucratic elites. The Africanization of the civil service was prioritized as the core of post-colonial nation building. The civil service structure, however, was kept intact with its privileged ‘European’ and lower-level ‘African’ positions retaining their colonial characteristics. Only the race of the occupants of the ‘European’ positions had changed. In about five years after independence, the enhanced upward mobility of African personnel that was set in motion to foster the indigenization of the ‘European’ posts came to an end with the consolidation of a distinct bureaucratic elite class (Leonard, 1984). The Africanization of business and real estate could be considered the second phase of indigenization that came about towards the end of the 1960s and the first half of the 1970s. In the same manner as in the allocation of land and credit, the transfer of trading and real estate interests from Asian Kenyan and foreign hands also favored established businessmen and people with political connections, contributing to reinforcement of the class division.

Table 1: Basic growth and national account indicators in the formative years

<table>
<thead>
<tr>
<th>Period</th>
<th>Average real GDP growth</th>
<th>Share of government consumption of per capita GDP</th>
<th>Share of investment of per capita GDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>1964-65</td>
<td>4.1</td>
<td>2.56</td>
<td>8.55</td>
</tr>
<tr>
<td>1966-70</td>
<td>7.98</td>
<td>3.08</td>
<td>16.2</td>
</tr>
<tr>
<td>1971-75</td>
<td>5.46</td>
<td>4.52</td>
<td>19.8</td>
</tr>
<tr>
<td>1976-80</td>
<td>5.86</td>
<td>5.71</td>
<td>18.2</td>
</tr>
</tbody>
</table>

2 – Heston et al. (2011)

The continued bifurcation of Kenya’s society along class lines did not happen in vacuum. It was accompanied by commendable, albeit erratic, economic growth performance in the first decade and half after independence. Like most of the newly independent African countries, Kenya was off to a good start economically in the 1960s. The uncertainties that had prevailed around independence in 1963 were defused with reassurance from the new African elites. As shown in Table 1, real GDP growth doubled to an average of nearly 8 percent between 1966 and 1970. This steady average performance was registered in spite of a global slowdown towards the end of the 1960s and the susceptibility of Kenya’s ‘small-open economy’ to external market shocks. The encouraging performance of the country in the first decade after independence had a lot to owe to the partial land reform which had redistributed colonial settler land to more efficient smallholders, and the extension of the area cultivated in high value cash crops (Ndulu and Mwega, 1994). As Table 1 shows, the share of investment in GDP also peaked at close to 20 percent in
the first half of the 1970s. On the contrary, the growth in government consumption was not very fast given the fact that this was an era of state building.

Taking stock of the foregoing narrative on ethnicity, class formation and economic growth in pre- and early post-independence Kenya, one is able to discern the conjoining development of political ethnicity and class cleavages. In summary, three important patterns are worth noting: a). ethnicity came to define political agenda at the eve of independence due to the need for strengthening bargaining power in a society that is already balkanized by an existing administrative structure; b). the natural growth of African capitalist class was obstructed by the state’s reaction to Mau Mau rebellion which had reoriented the loyalist business class to increasing state dependence; c). after independence, most of the capitalist class formation was driven by the mere Kenyanization of colonial privileges without changing the distribution a lot.

I shall move next to investigate why ethnicity persisted as the prime basis of political mobilization in the face of competing class cleavages and expanding economic space. The potential explanations are organized in four claims motivated by the theoretical discussion in the previous section. The claims will subsequently be subjected to empirical examination. The first two sets of explanations are based on structural factors. The remaining two sets are mostly determined by strategic considerations of the elites, which are in turn predicated on the structural explanations.

**Claim 1:** Economic growth widened the already existing income gap between the more cosmopolitan and largely rural communities in Kenya. Since geographic income disparities coincided with ethnic cleavages, economic growth ended up enhancing cross-ethnic wealth inequality. Therefore the potentially liberalizing effect of the increase in national wealth was offset by the feeling of collective alienation that economic growth created by increasing group inequality.

Kenya is a creation of agriculturally oriented settler colonialism. Therefore, the mapping of economic opportunities is inevitably shaped by suitability for cultivation of cash crops which tends to vary from one geographic region to another. As Hazelwood (1979) points out, “the greatest regional inequalities are the work of nature. One need look no further than the 307 mm rainfall in North Eastern Province and the 1084 mm in Central Province to find a major cause of inequalities between the two” (pp. 175). Therefore, the incidence of economic opportunities across different ethnic groups were bound to be in favor of the residents of the Central and Western Highlands which were suitable for cash crop farming.
But agro-ecological disparities and exposure to western influence are not the only explanations to the horizontal inequality between ethnic groups prevailing even in the early days of colonization. Part of the explanation for the difference in capitalistic tendencies, for instance between the Kikuyu and the Meru, both residing near the central highlands, is culture. The cultural value of the Kikuyu of celebrating wealth and personal achievement is well documented in the literature (for example, Atieno Odhiambo (2004), Fallers (1964), Mesiler (1970)). Although agricultural wealth acquired due to one's place of origin was the major source of prosperity in the colonial times, it was not the only reason for cosmopolitanism. Exposure to modernization could also come with migration to urban centers. The Luo became more cosmopolitan because they migrated in mass to the urban centers of Nairobi and Mombasa in search of employment due to population pressure in their native reserves.

The horizontal inequalities that were implied in agro-ecological differences and western influences such as modern education were not static. They gave rise to further inequalities through path-dependence in the administrative and political processes. Hence, groups in the well endowed and colonially exposed regions had accumulated productive capacity that would give them a head-start once the yolk of political and economic repression was removed. This trend was nowhere more evident than in the comparison between Nyanza and Central Province, two regions that had roughly the same value of marketed output until 1957. In the wake of the end of the emergency after 1957, “Central Province drew rapidly ahead, so that by the time of independence, its marketed output from small farmers was roughly twice that of Nyanza Province” (Hazelwood, 1979, pp. 10).

Concerns over regional inequalities dominated the pre-independence negotiations of Lancaster House. Nevertheless, the prompt consolidation of a unitary government with liberal public policy paved the road for the reproduction of pre-existing economic disparities in the allocation of high-level government positions. In 1972, after all ideological differences had been quashed and Kenyatta's inner-circle had securely established their hegemony, 41.4 percent of top-level government officials in the country hailed from the Kikuyu ethnic group which constituted only half as much of the total population (Nellis, 1972). This over-representation of the Kikuyu was achieved mostly at the expense of ethnic groups such as the Luo, who accounted for 8.6 percent government positions in spite of 13.9 percent population share, and the Luhya, who accounted for 10.3 percent government positions whereas they constituted 13.2

39. Government positions that are included in this survey are presidency and cabinet, assistant ministers, permanent secretaries, deputy permanent secretaries and under secretaries, provincial commissioners, deputy provincial commissioners and district commissioners, and officials from the armed forces.
percent of the population. But it is difficult to attribute these disparities to conscious political bias. After all, the Kikuyu were the most educated of all ethnic groups in Kenya. “If all promotions and appointments could be controlled strictly by an objective, computerized test of merit, the Kikuyus probably would still hold almost all the positions they have today” (Meisler, 1970, pp. 117).

By mid-1970s the regional inequalities in welfare and development had become fairly visible in the statistics (see Table 2). Central Province was clearly ahead of every other province, having registered substantial gains in education and access to welfare-enhancing services compared to the national average. When one contrasts that with the figures for Rift Valley Province which attained far less than the average provision of education and welfare services despite being endowed with most of the country’s high potential land, it becomes clear that development in Kenya of the 1970s was lopsided. The fact that Central Province had a high number of export crop producing smallholders could easily attract attention as one of the potential sources of such disparity. However, this explanation fails to hold water because it is contradicted by the case of Eastern Province which lacks substantially in education and welfare services in spite of having a disproportionately high share of export crop producers. A curious question here is: why did the Luhya region of Western Province fare reasonably well regardless of its endowment of neither high potential land nor export crops? Here, it is worth noting that the Luhya live next the ‘troublesome’ Luo (as far as Kenyatta’s regime was concerned) and that they were almost tied with the Luo for the second most populous ethnic group. Therefore, it would not be presumptuous to assume that the Kenyatta administration was keen to cajole the Luhya in order to prevent them from colluding with the Luo to the peril of the Kikuyu hegemony.

It remains to be shown yet how these disparities are linked to persistence of ethnic allegiances. The first instance when the ‘revealed preference’ for ethnic allegiance was tested came with the independence elections of 1963. The results showed the clear alignment of the supposedly less advanced and largely rural ethnic groups of the Rift Valley and Coast with the agenda of majimboism (federalism). The leaders of those groups had openly argued that majimboism would protect their interest from being outmaneuvered by the bigger and wealthier ethnic groups. Rather interestingly, the same pattern reemerged after 30 years when multiparty democracy was reintroduced in 1992. Although this time, the smaller and less-advanced ethnic groups were the incumbents and economic growth had been steadily recovering between 1985 and 1990. Alas, feelings of inequality and ethnic allegiances proved to die hard. As a result, the Kalenjin invoked long-standing land grievances to incite violence to retain their grip on power.
## Chapter Three – United We Stand, Divided We Huddle

### Table 2: Regional disparities in welfare and development (1970s)*
(Kenya=0)

<table>
<thead>
<tr>
<th>Province</th>
<th>Central</th>
<th>Coast</th>
<th>Eastern</th>
<th>Nyanza</th>
<th>Rift Valley</th>
<th>Western</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major ethnic group (percentage of the group living in region)</td>
<td>Kikuyu (73%) Coastal people (98.4%) Kamba (87%) Luo (87%) Kalenjin (95%) Luhya (80%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Population</td>
<td>15.3%</td>
<td>8.6%</td>
<td>17.4%</td>
<td>19.4%</td>
<td>20.4%</td>
<td>12.3%</td>
</tr>
<tr>
<td>Land</td>
<td>-13.0</td>
<td>-6.0</td>
<td>+10.0</td>
<td>-17.2</td>
<td>+9.3</td>
<td>-10.9</td>
</tr>
<tr>
<td>Land of high potential</td>
<td>-1.9</td>
<td>-3.1</td>
<td>-10.0</td>
<td>-1.4</td>
<td>+24.2</td>
<td>-1.4</td>
</tr>
<tr>
<td>Coffee smallholders (number)</td>
<td>+21.8</td>
<td>-8.4</td>
<td>+21.2</td>
<td>+0.6</td>
<td>-19.3</td>
<td>-9.3</td>
</tr>
<tr>
<td>Tea smallholders (number)</td>
<td>+18.5</td>
<td>-8.6</td>
<td>+19.0</td>
<td>-3.4</td>
<td>-12.7</td>
<td>-6.1</td>
</tr>
<tr>
<td>Wage employment</td>
<td>+0.3</td>
<td>+3.8</td>
<td>-9.6</td>
<td>-12.0</td>
<td>+4.9</td>
<td>-8.1</td>
</tr>
<tr>
<td>School enrollment, primary</td>
<td>+4.4</td>
<td>-3.1</td>
<td>+1.4</td>
<td>-0.4</td>
<td>-2.1</td>
<td>+3.1</td>
</tr>
<tr>
<td>School enrollment, secondary</td>
<td>+8.5</td>
<td>-2.7</td>
<td>-1.3</td>
<td>-3.0</td>
<td>-8.1</td>
<td>+3.0</td>
</tr>
<tr>
<td>Access to drinking water (dry season)**</td>
<td>+15.1</td>
<td>-39.9</td>
<td>-15.7</td>
<td>-3.7</td>
<td>-3.2</td>
<td>+20.0</td>
</tr>
<tr>
<td>Access to Health center***</td>
<td>+24.1</td>
<td>-11.3</td>
<td>-38.2</td>
<td>+17.7</td>
<td>-15.2</td>
<td>+3.3</td>
</tr>
<tr>
<td>Access to Market***</td>
<td>+8.1</td>
<td>-41.2</td>
<td>-24.3</td>
<td>+21.6</td>
<td>+0.1</td>
<td>+1.8</td>
</tr>
</tbody>
</table>

*The positive or negative scores of provinces show the advantage or disadvantages, respectively, that the provinces have in that particular aspect with respect to the national average. The national average is normalized to zero. The numbers may not add up to zero because the provinces of Nairobi and North West are left out from the table.

**Access within 1 mile distance  **Access within 4 mile distance

Source: Hazelwood (1979)

A more recent event that has demonstrated the persistence of ethnic allegiances motivated by long running feelings of group inequality is the 2007 election. The Kikuyu-dominated incumbent government was being challenged by an opposition alliance of the Luo (who had lost their original cosmopolitan advantage due to extended marginalization under both Kenyatta and Moi) and the Kalenjin (who still felt relative deprivation originating in colonial disadvantages). Despite robust growth performance that was registered for about 5 years before the election, the electoral agenda was driven by the failure of the government to effectively share executive power and review the constitution in a way that would rectify historical inequalities. The violence that followed the election was a stark reminder of how deeply imbedded ethnic allegiances are in perceptions of group inequalities.
However, ethnic groups are far from monolithic. Just like the horizontal group inequalities discussed above, income and wealth inequalities within ethnic groups are important in determining the salience of ethnicity. On top of economic differences, cultural heterogeneities also could prevail among the sub-groups of a single ethnic group. The following claim sheds light on the relevance of within group heterogeneity.

Claim 2: During Kenyatta’s administration, the economically heterogeneous Kikuyu instituted a unitary state which was predisposed to favor the liberal nation state paradigm. During Moi’s administration, the economically homogenous – but culturally heterogeneous – Kalenjin retracted to regional focus based on ethnic boundaries. In the latter case, economic homogeneity trumped the countervailing effect of cultural heterogeneity to solidify ethnic allegiances.

First of all, the Kikuyu have always been the most populous ethnic group in Kenya. Often, with numerosity comes heterogeneity. Beginning in early colonial times, “differentiation was particularly rapid in the Kikuyu reserves” (Hornsby, 2012, pp. 39). This could be attributed to the widely acknowledged capitalistic inclination of the Kikuyu. The migration patterns since before independence also show how this tendency of differentiation among the Kikuyu was dynamically reinforced as opposed to the maintenance of relative homogeneity, for instance, among the Luo. The Kikuyu usually migrated to pursue commercial farming and to settle in the new place permanently. This usually severed most ties the migrants had to their ancestral community and contributed to increasing heterogeneity. On the contrary, the Luo migrated as workers who maintained strong links with their rural home areas. Accordingly, they redistributed wealth through traditional channels of remittances in a way that preserved economic homogeneity.

But the most important and enduring pattern of differentiation among the Kikuyu had not emerged until the Mau Mau rebellion. The insurgency, which was triggered partly by the feeling of betrayal of landless Kikuyu, ended up reinforcing the existing cleavages between the collaborator and insurgent groups. Therefore, by the time independence was approaching, staving off the pressure that had built among the Kikuyu was top priority for the new Kikuyu elite. That could have not been achieved without adopting a liberal nation state paradigm which would give the Kikuyu unfettered access to larger pool of national resources such as land in the Rift Valley Province. The Kikuyu had the Luo as their allies in their pursuit of a unitary nation state. The Luo were not as heterogeneous as the Kikuyu, but they were sufficiently more differentiated than the Kalenjin. This moderate level of differentiation was evident in the balkanization of the community as groups of urbanized labor (represented by Tom Mboya) and rural based community (represented by Oginga Odinga). This pattern
might have contributed to the liberal nationalist stance of Luo leaders at the eve of independence.

The heterogeneity of the Kikuyu led them to advocate a liberal unitary state at independence. Nevertheless it never changed the core of their allegiance from their ethnic group to the nation state. This was clearly demonstrated in the traditional oathing rituals that the Kikuyu embarked on in mass when the unrest following the death of Tom Mboya threatened their hegemony in 1969. Therefore, heterogeneity might not always bring about alignment with the nation state as it was implied in the above claim. The non-monotonic nature of the effect of heterogeneity could probably be explained by the strategic actions of the elites which I will present in the third claim shortly.

The second half of claim 2 characterizes the centrifugal effect of homogeneity, as opposed to the centripetal influence of heterogeneity. The historical context in this case is set in the 1980s and 1990s when the Moi administration was shifting the locus of effective control from the center to the regions in the interest of reinforcing its Kalenjin bailiwick. The economic homogeneity among the Kalenjin was self-evident in the very process in which the ethnic group was created towards the end of the 1940s as an amalgamation of several smaller tribes seeking to increase their collective bargaining power. “Despite their recent progeny, complex make up and internal divisions, the community has become one of Kenya’s most united in terms of electoral and referendum voting patterns, while members have acted as key participants in recent ethnic violence” (Lynch, 2011, pp. 4). The economic homogeneity which was underlain by the rurally-oriented lifestyle of the Kalenjin had deprived Moi of dependable urban allies when he acceded to the presidency. By 1978, there was virtually no Kalenjin parastatal executive, businessmen or even senior politician (Hornsby, 2012).

In summary, Kenya’s experience shows that the effect of relative homogeneity in fostering ethnic allegiance is more consistent and monotonic than the effect of relative heterogeneity in enhancing liberal nationalism. Moreover, the Kalenjin case stands as strong evidence to the fact that, as far as there is sufficient level of economic homogeneity, cultural (or ancestral) heterogeneity could be downplayed with minimal common denominator to hold ethnic allegiances together.

I have hinted above that the failure of heterogeneity in bearing a more consistent impact on countering ethno-nationalism could have something to do with the strategic actions of the elites. The next claim applies the logic of natural state to characterize the role of the elites on maintaining ethnic allegiances in heterogeneous societies.
Claim 3: The dominant coalition elites in Kenya have shut off organizational avenues for the non-elite so that the latter do not mobilize themselves. This is done with a mutual understanding among the elites that they would revert to playing the ethnic card in case intra-elite bargains fail to be enforced. This equilibrium strategy is part of what has held the dominant coalition together.

Kenya’s first generation organized elites were liberal, pan-ethnic technocrats. These elites constituted the short-lived leadership of the Kenya African Union (KAU) of the early 1950s, composed of “old boys of the leading missionary boarding school, Alliance High School” (Lonsdale, 2004, pp. 83). The liberal platform of these pioneering elites was met with Mau Mau aggression in a way that is reminiscent of typical class struggle. As a consequence, the ‘dispirited tennis-court liberals’ left the scene, giving way to sterner ethnic conservatives (Lonsdale, 2004). This ‘new’ generation of leaders (including Kenyatta), however, had learned a valuable lesson from their predecessors not to ever let their guards down in the face of simmering class consciousness.

The sporadic sprouts of populist resistance spearheaded by veteran politicians such as Oginga Odinga could be mistaken for organized class struggle. In almost all populist movements in Kenya, however, the major protagonists have been members of the petty bourgeoisie. “Although this populism has attracted substantial peasant and worker support, it is clearly a petty bourgeoisie ideology for it advocates the interest of that class in small business and promotes kulak over capitalist agriculture” (Leonard, 1984, pp. 150-51). As fig. 2 shows, the bi-circular band that represents direct access to the organizational privileges of the dominant coalition is mostly confined to the tip of the pyramid in each ethnic group occupied by the political and economic elite-proper. There are at least three types of equilibrium scenarios that may characterize the potential outcomes of the repeated game played between the elites of different ethnic groups: 1). middle-class cooperation, 2). retreating to ethnic enclaves, and 3). all-out ethnic violence.

At times of middle-class cooperation, the size of the dominant coalition band in fig. 2 expands further down to reach the petty bourgeoisie rungs of the pyramids. Such enlargement gives the petty bourgeoisie of ‘ethnic group A’ access to the petty bourgeoisie of ‘ethnic group B’. It is possible that such common access to petty bourgeoisie organizations might be used to coordinate on class interest. However, the elite-proper will always make sure that the petty bourgeoisie are effectively separated from the non-elites (i.e. the bottom rung) to limit the contagion of class-consciousness. In case the petty bourgeoisie of the two ethnic groups attempt to launch more coordinated action relying on the support of the non-elite, the elite-proper will resort to a trigger strategy. The trigger strategy is represented by the second equilibrium scenario of ‘retreating to ethnic enclaves’. This strategy severs the link between the two petty bourgeoisie
classes, limiting the reach of the dominant coalition to the tips of the pyramids and confining the rest of the communities to their ethnic enclaves.

Figure 2: Ethnic pyramids stratified according to class and coalition membership

The continued salience of ethnic allegiances is crucial for the elite to be able to play the trigger strategy of retreating to ethnic enclaves. Kenya’s elites have struggled to reserve ethnocentrism as a ‘max-min’ option that would ensure the maximum possible return in the event of the realization of a trigger strategy. Dominant coalition elites were willing to use extra-legal means to punish defectors who threatened to jeopardize the essence of this strategy. All of the first three instances of political crisis in the history of independent Kenya were triggered by a threat of trans-ethnic mobilization. At those times, class-consciousness or cosmopolitan meritocracy was being promoted to undermine ethnic allegiances. Hence, the dominant coalition elites scrambled to save the vitality of ethnicity as a ‘max-min’ option by eliminating the defectors. A brief summary of the stories of the three high-level political assassinations that were executed to preempt trans-ethnic mobilization is presented below.

a. The Pio Gama Pinto assassination (1965) – in less than two years after independence the imported influence of the socialist bloc countries increased through existing links with Oginga Odinga and his allies. Accordingly, a group of politicians began to systematically organize their challenge on the capitalistic policies of the regime. It was then that the inner-circle elites decided to preempt the precipitating class struggle by eliminating one of the key players in Pio Gama Pinto. They soon alienated the largely Luo group of politicians, reducing the impending class problem to a tribal one.
b. The Tom Mboya assassination (1969) – having risen to power on the back of a labor union movement, Mboya was probably the most cosmopolitan of Kenya’s founding politicians. He was so pragmatic a politician that he became the intellectual godfather of the country’s free market ideology to the dismay of his former labor union allies. Mboya’s strategy of trans-ethnic coalition building was deemed a threat not only by the Kikuyu inner circle, but also by the elite from his own Luo ethnic group led by Odinga (Hornsby, 2012). After Mboya was assassinated, riot broke out in Luo country and the Kikuyu swiftly went back to their rituals of oathing to maintain ethnic solidarity. Ironically, Mboya appeared more Luo in death than in life.

c. The J.M. Kariuki assassination (1975) – the third challenge to threaten the ethnic firewall came from a wealthy Kikuyu. Kariuki managed to build a broader coalition with Rift Valley politicians and Kikuyu backbenchers, making significant inroads into the government’s Central Province support (Widner, 1992). He was also considered to have the legitimacy to champion the cause of the poor, despite his personal wealth, since he was an ex-Mau Mau fighter. In the event of his assassination, the Kikuyu-dominated welfare association, GEMA, scrambled to bolster Kikuyu solidarity in an open and organized manner.

The full story has never been unveiled in all the three assassinations, although individual culprits were tried and convicted. Following all the above events, things went back to normal relatively quickly after some public protest. Most of the communities retreated to their own ethnic enclaves; but the dominant coalition was saved with little scathe.

Therefore, the third equilibrium scenario – all-out ethnic violence – remains an ‘off the equilibrium path’ strategy as long as the trigger strategy of retreating to ethnic enclaves without destabilizing the dominant coalition is feasible. But this is possible only so far as the elite-proper are able to defuse class-consciousness that is mostly radiated by the petty bourgeoisie in Kenya. In other words, the elite-proper should be able to compartmentalize the political organization of the petty bourgeoisie and the non-elites in separate rungs of the ethnic pyramid. This is precisely what the reintroduction of multiparty politics took away from the elites. The crosscutting political mobilization that is normally inbuilt in multipartyism would break the compartmentalization of the lower rungs of the ethnic pyramid. The petty-bourgeoisie who had always tried to infuse class politics in Kenya could have a chance to mobilize the non-elites in a political party. As populist politics became imminent with the reintroduction of a multiparty system, the role of the dominant coalition to enforce intra-ethnic compartmentalization seemed to begin waning. This essentially deprived Moi’s Kikuyu allies of the benefit they would get due to their association with Moi in the dominant coalition.
Anticipating that the old protocols of his single-party dominant coalition would no longer be viable, Moi resorted to ethnic violence, which would have otherwise been ‘off the equilibrium path’ deterrence. Moi had openly argued that multiparty democracy would inevitably degenerate into tribal bloodshed\(^{40}\). In light of the ethnic violence that was perpetrated after the 1992 elections mainly by Moi’s Kalenjin allies, his statement was a self-fulfilling prophecy.

So when does it become in the elites’ interest to cross ethnic boundaries and restructure the pyramids in fig. 2 in a different manner? I apply the notion of individual-specific rent to hypothesize that Kenya’s elites would have opted to reconfigure the patron-client networks as trans-ethnic structures had they had a clear collective advantage in terms of merit-based benefits accruing to them regardless of ethnic organizations.

**Claim 4:** Economic growth and social development in early post-independence Kenya failed to make non-ethnic forms of political and economic organization as sufficiently resistant to natural state shocks as ethnic organizations. This happened because most of the rents of the dominant coalition elites remained tied to their leadership of ethnic organizations. For various reasons, the development process did little to enhance the individual-specific rents of the elites.

The most common source of individual-specific rent is human capital acquired in the form of natural talent, education, or productive experience. One can see the effect that a distinctively educated elite class may have on the development of a trans-ethnic liberal platform in the experience of the pre-independence first generation leadership of the KAU as discussed above. Actually, the educational advantage of the ruling elites persisted until independence and beyond as the founding politicians were sufficiently educated. Besides there were more young educated elites coming through the mass airlifts of ‘O-level’ students to US universities organized by Tom Mboya between 1958 and 1961. However, the expansion of education opportunities to the broader population was catching up at a faster pace. Secondary school enrollment increased fourfold within a matter of seven years after independence. With free tertiary education, enrollment to University College Nairobi quadrupled to over 2000 between 1963-4 and 1969-70 (Hornsby, 2012). Inevitably, this expansion diluted the individual-specific rent the elite could have reaped due to their head-start in human capital.

Even if there was any growth in the individual-specific rent of the dominant coalition elites, it would have been far from uniformly distributed among elites from different

\(^{40}\) Rick Lyman, *The Inquirer*, May 03, 1992.

Institutional change in the long shadow of elites
ethnic groups. Obviously, the Kikuyu elites had overwhelming advantage in terms of education and formal sector experience. Moreover, the elites of the formative years were split into two along the rural-urban divide. This split saw the rural-stationary segment juxtaposed with the bureaucratic-mobile segment (Holmquist, 1984). One can deduce from the very characterization of the two segments that the bureaucratic segment would have higher individual-specific rent than the rural segment. Such heterogeneity among powerful elites in the potential gain from reconfiguration would keep patron-client networks confined to ethnic enclaves.

The historical structure of the Kenyan economy also prevents the dominant coalition elite from venturing into restructuring patron-client networks. Notwithstanding the vibrancy of the country’s economy in the first two decades after independence, its growth performance was erratic (see Appendix 2). Kenya’s economy appeared to be subject to, more than anything else, the vagaries of nature. Appendix 3 presents the results of a set of time-series regressions trying to explain the natural logarithm of real GDP per capita by exogenous factors, proxying weather conditions, export earnings and import expenditure. In line with the predominantly agricultural nature of the country, rainfall is found to be the only significant factor that is strong enough to influence per capita output on relatively permanent basis. Such a trend will most likely force the elites to be more cautious in appraising the potential of their individual-specific rents. Therefore, the elites are more likely to stick to their ethnic base.

IV. The tale of two transitions: theoretical framework and historical narratives

In the previous section, ethnic allegiances have been shown to be the most important organizing parameters in Kenyan society. Nevertheless, the two presidential successions in 1978 and 2002 were supported by some form of collective action platform other than ethnic allegiances. This is demonstrated in the fact that the victorious parties at the time of both transitions had mobilized trans-ethnic base of support. The fact remains that the non-elites have been organized along ethnic lines as depicted in fig. 2. But the elites, represented by the tip of the pyramids in fig. 2, must have been organized along additional lines of affinity for the leaders of the sub-coalitions to be able to mobilize trans-ethnic support. A more or less straightforward way to categorize elites is based on their comparative advantage as political or business personalities. This means a certain individual elite can be defined on two different dimensions: first, by ethnic affiliations and second, by either political or economic organization.
The next sub-section zooms in on the alignment of the dominant coalition elites along political and economic lines. The conceptual framework presented below will also attempt to open up the black-box of intra-coalition competition using the generic distinction of political versus economic organizations among several potential distinctions that could be drawn to categorize the elites. Towards the end the sub-section, I will overlay the political-economic categorization on top of the ethnic-based configurations of the dominant coalition to predict the nature of the dynamics that might have supported the two transitions in Kenya.

a. **Intra-elite competition through political and economic organizations: a theoretical framework**

The internal structure of dominant coalitions in natural states is always in flux. There is constant reshuffling of powerful elites in terms of their access to means of violence and economic rents. The fact that violence is avoided does not imply that there are no losers and winners in terms of the continuous reallocation of rents. As long as every violence specialist remains better off within the dominant coalition, the cessation of violence will be observed even if the reconfiguration of the power balance might have caused some elites to lose rents. The dominant coalition holds together unless the probabilistic outcomes that might follow a violent breakup of the coalition outweigh the stream of rents secured through third-party enforcement provided by the dominant coalition. The fortunes of different organizations could change as their leverage to extract rents change. The gain or loss of individual elites is mostly tied to the influence of the organizations they are primarily affiliated with. This section attempts to show how the collective structure of political and economic organizations influences the internal dynamics of dominant coalitions.

The focus on political and economic organizations emanates from the long standing trend in the literature of distinguishing between the forces of coercion and the owners of means of production. In Holt and Turner (1966), the existential tension between wealth and authority is presented as one of the forces shaping the political economy development of societies. The extent to which wealth is allowed to buy power, as opposed to only prestige, determines the pace of economic development in the long-run. Tilly (1992) highlights the tension between those with means of coercion and the ones with means of production by pointing out the series of structured bargains that require the state to make certain concessions to those being taxed in order to continue extracting resources. Migdal (1988) argues that the degree of cohesion in state-society relationships is determined by the level of social control that the state or the non-state portion of society exercise. If one wishes to draw a parallel of Migdal’s characterization
of state-society relationship in the context of a dominant coalition of elites, the closest projection will be a political-versus-economic elite dichotomization.\textsuperscript{41}

The NWW framework posits that political and economic organizations in natural states are highly intertwined to the point of being indistinguishable.\textsuperscript{42} But it still recognizes the political-versus-economic distinction as the most fundamental basis of categorizing dominant coalition organizations. The current conceptual framework builds on the NWW framework at the same time as it introduces the nuances of coercion-versus-production within the dominant coalition in the spirit of the literature sampled in the above paragraph. The framework maintains the central proposition of the double balance between the distribution of political power and the incidence of economic rents. The distinction in the primary categorization of political and economic organizations is drawn based on the type of access a particular organization has to violence and economic rents. Accordingly, political organizations are organizations with direct access to mobilization of violence and indirect access to extraction of rents. Conversely, economic organizations are organizations with indirect access to mobilization of violence and direct access to extraction of rents.

Pursuant to the double-balance idea, the two types of organizations have symbiotic relationship in natural states. Economic organizations extract existing rents from non-elites. They do also create more rents as their productivity rises. In the process, they share parts of the rent collected with political organizations in exchange for the latter’s support. Political organizations use their capacity for violence to guard the rents that are available to economic organizations. I assume that individual elites have comparative advantage to be allied with one or the other type of organizations. This assumption does not restrict the fact that elites could straddle both types of organizations; nor does it rule out dynamic changes in comparative advantage as elites build economic or political influence. But it implies that an elite’s share of rents at a certain point in time is determined by the effectiveness of the organization for which they have comparative advantage.

Economic organizations extract rents in different forms such as monopoly rents and tariff protection. Then they transfer parts of the rents to political organizations in the form of taxes, kickbacks or campaign contributions. The distribution of rents among these two types of organizations is determined by how well organized each of the respective groups is. Assuming the identity and number of elites with privileged access

\textsuperscript{41} Acemoglu (2005) has already formalized the strong state-weak state dichotomy with implications for property rights protection.

\textsuperscript{42} “In a natural state, all big economic organizations are necessarily also political organizations because they cannot survive and protect their privileges without serving political ends.” (NWW, pp. 146)
to political and economic spaces is fixed at a given time, the degree of concentration of existing organizations is the primary determinant of the collective bargaining power of the elites. The more concentrated political organizations are the more suited they would be to demand bigger share of the rents. The same logic applies in the case of economic organizations.

Now, let me bring together the political-economic and ethnic dimensions of dominant coalition organizations using a simple matrix representation. Suppose there are two major ethnic groups in a given society. Let $N_{Pi}$ be the number of elites belonging to ethnic group i who have comparative advantage in political organizations. Likewise, let $N_{Ei}$ be the number of elites hailing from ethnic group i who have comparative advantage in economic organizations. Fig. 3 displays a two-by-two matrix representing the intersections between political-economic organizations and ethnic organizations. The four clusters of elites represented by the circles could be viewed as interdependent centers of power the influence of which depends on the size of $N_{Pi}$ or $N_{Ei}$. The circles are bound vertically by ethnic allegiances, while the horizontal bonds are formed by political and economic organizations.

Consider each pair of circles bound by a vertical or a horizontal band to be a conveyor belt of rents. The vertical conveyor belts redistribute rents among co-ethnic elites, whereas the horizontal conveyor belts are used to share rents within political or economic organizations. Putting this framework in perspective with the foregoing assumption about sharing of rents between political and economic organizations, one

43. This assumption should not be too restrictive. Even if one assumes there are more than two major ethnic groups, it is possible to extend the framework to accommodate several pairs of ethnic groups (sub-coalitions) which can be joined together later to analyze the big picture of the entire dominant coalition.
can see that ethnic organizations serve as conduits for the flow of rents between political and economic organizations. The strength of the vertical conveyor belts depends on factors such as in-group homogeneity as identified in section 3. The strength of the horizontal conveyor belts is determined by the degree of concentration of the respective type of organization as well as the relative size of the two circles (i.e. ethnic-based centers of economic or political power). The relative strength of the vertical or the horizontal conveyor belts depends on whether the elites rely on individual-specific rents as opposed to organization-specific rents. Since the categorization of elites in either political or economic organizations is assumed to be dictated by their comparative-advantage, unlike in ethnic organizations, more reliance on individual-specific rents strengthens the horizontal conveyor belts.

The vertical set of conveyor belts can operate independently of the horizontal set, and by implication independently of each other, as long as the political and economic centers of power within each ethnic group are strong enough to generate rents to keep the belts running. Such cases are characterized as autarky in section 3. On the contrary, the horizontal conveyor belts in natural states cannot operate independently of each other since rents should be funneled from economic to political organizations through some form of intermediary group. Accordingly, even if both political and economic organizations fragment to the point of pushing the coalition into fragility, the elites could retreat into their ethnic organizations to avoid full-blown crisis. Another scenario features the weakening of the ethnic tie in either of the groups while the other group holds together at the same time as political and economic organizations are sufficiently concentrated. Under this scenario, the stability of the dominant coalition will be maintained since rents will be delivered effectively using the three standing conveyor belts. A critical situation arises if one of the ethnic conveyor belts fails at the same time as one of the political or economic conveyor belts breaks down. In this case, one center of power would be left completely out of the loop, threatening violence.

The next sub-section employs the power mapping of the political and economic interest groups in Kenya along with the underlying ethnic structures to explain the natural state dynamics surrounding the two presidential successions in the post-independence history of the nation.

b. The Kenyatta succession

The first step to analyze the coalition dynamics around Kenyatta’s succession using the theoretical framework presented above should be characterizing the process of consolidation of political and economic organizations in the years leading-up to the transition. Previous sections have already indicated that the late 1960s saw significant
collusion between the political and economic elites in Kenya. Political organizations were concentrated around a powerful presidency. Economic organizations were dominated by a symbiotic relationship between multinational business interests and local landed elites. Therefore, as a point of departure for the transition of 1978, the dominant coalition at the beginning of the 1970s could be characterized as a crony capitalist alliance marginally dominated by more concentrated political organizations.

**Political and economic interest groups of the 1970s**

**Political interest groups**

With the radicals of KPU already out of the picture, by the dawn of the 1970s, KANU had already begun its decent to dormancy. With no ideological support provided by a viable party, the political organizations of the young nation were held together by the strongly centralized executive and well-oiled patronage machine. The ethnic bond among the overtly dominant Kikuyu also had made political mobilization easier. That was about the time when the Gikuyu, Embu and Meru Association (GEMA) entered the national scene. Although the organization was established with a mandate of a social welfare association, most of GEMA’s leadership was composed of political heavyweights including several cabinet ministers. The association was able to mobilize the support of wealthy businesspeople and poor farmers alike. Two years after establishment the association’s leaders decided to pass over the leadership role to business people in order to avoid public criticism that it was becoming a political organization. GEMA was a curious case in Kenyan politics in the way it blurred the distinction between political and economic organizations for most of the 1970s. Although GEMA was sometimes presented as an ordinary investment group, most of the elite members of the association were hardly interested in the group for pure profit motives. Apparently, many of them had already made a name for themselves in business.

The unifying effect of ethnic allegiances was tested when class tensions surfaced in earnest towards the mid 1970s. The political tension was intensified because it originated from within the Kikuyu community, with the potential of rocking the dominant coalition at its core. The extralegal procedures for rectifying this particular intra-elite conflict culminated with the assassination of J.M. Kariuki, a fiery Kikuyu parliamentarian and advocate of a more equal wealth distribution (Throup, 1987, pp. 52).

44. According the theoretical framework in section 5, due to the strong bond among the Kikuyu, the threshold parameter ‘alpha’ is smaller.

GEMA’s political backside was revealed when its leaders used the association’s platform to scramble to save the Kikuyu hegemony that was seriously threatened by the assassination of J.M. Kariuki. Regardless of the effort, the intra-Kikuyu tension that followed the assassination severed the core of the association from the non-Kiambu Kikuyu elite. At some point, Kenyatta himself appeared uncomfortable with the aggressive manner with which GEMA played politics. He asserted at a GEMA rally that he would not hesitate to ban any organization whose activities were detrimental to the country’s stability. The haste with which the political elites tried to revitalize KANU a few months after the Kariuki crisis testifies to the insecurity they had felt with the widening organizational vacuum and the risk of KANU being supplanted by GEMA.

The final blow to the dominance of concentrated Kikuyu centers of power came with the failed attempt by GEMA’s leadership to get the constitution amended to bar the vice president from succeeding the presidency. Ironically, the real power implications of the ‘Change the Constitution’ confrontation had more to do with the Kikuyu supporters versus the Kikuyu challengers of the vice president than the vice president himself. The campaign pitted the very powerful Attorney General, Charles Njonjo, who teamed up with Finance Minister, Mwai Kibaki, in support of the vice president, against most of GEMA’s leadership.

After the core of the Kikuyu political hegemony had fallen out, the demonstration effect triggered the breakup of other political alliances as well. The silent fragmentation of the political elites continued until the eve of the 1977 KANU election, which was later cancelled at the eleventh hour because the president was alleged to have fallen ill. In the lead-up to the cancelled election, the uncertainty on the ability of existing organizational mechanisms to guarantee future returns or impose future sanctions became intense. This uncertainty made those with votes to “trade promises for future concessions to whomever offered the highest price…, without regard for previous commitments made” (Widner, 1992, pp. 118). Tamarkin (1978) depicts a representative picture of the fragmentation in the following paragraph:

“[T]he extent of the political fragmentation of the tribes was clearly revealed in the recent intra-elite struggle between the ‘incumbents’ and the ‘challengers’ in the 1977 KANU elections. The alliances cut right through most of the tribes. The Kikuyu C. Njonjo and N. Mungai were the leading figures in the ‘incumbent’ and ‘challenger’ camp respectively. The Kikuyu M. Kibaki and J. Gichuru contested the
party chairmanship. D. arap Moi, the ‘incumbents’ candidate for vice-president, was to be opposed by T. arap Towett, a fellow Kalenjin.” (pp. 313)

- **Economic interest groups**

Although the economic organizations of the late 1960s appeared relatively concentrated around multinational interests and land buying companies, the fault lines in the business community were bound to surface as the economy expanded. This tendency for fragmentation of economic interest groups emanates from the history and structure of the economy. The persistent separation between the domains of foreign capital and the domestic bourgeoisie created fundamental problems for collective action. The parastatal sector, which had grown in importance in the 1970s, added a third axis to the economic space, making things rather complicated for organizing elite interest groups.

Manufacturing interest, dominated by foreign capital, was represented by Kenya Association of Manufacturers (KAM). On the commerce side, local trading interests were represented by the Kenya National Chamber of Commerce (KNCC). As the Africanisation drive intensified toward the mid 1970s, recurrent conflicts between the KAM and KNCC began to emerge in public (Swainson, 1977, pp. 42). The Chamber was behind the lobby effort to introduce the Presidential directive of 1974 which ordered all locally manufactured goods to be distributed by citizens, effectively cutting into the distributive margins of the multinational manufacturers. On the contrary, KAM lobbied for protectionist measures to restrict the inflow of imports which were central to the business of many of KNCC’s members.48

**The political economy dynamics leading up to the constitutional power transfer**

Piecing together the above segments portraying the configuration of elite organizations in Kenya of the mid-1970s, one gets the picture of a dominant coalition characterized by quickly fragmenting political interest groups coupled with dispersed economic organizations. The nationwide political dispersion was set in motion by the fragmentation among the Kikuyu that had led to a ripple effect in the form of KANU’s implicit division. The over-centralized executive could no longer offset KANU’s weakness to hold the political elites together as some of the powerful Provincial Commissioners

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were sucked into the political chasm.\textsuperscript{49} The fragmentation was not severe enough to threaten the overall stability of the dominant coalition because the Kenyatta persona was still there as the ultimate safety valve. Moreover, there was no strong, organized economic interest group that would have acted on taking advantage of the fragmented political interests to sway the ensuing equilibrium in their favor. GEMA was the only cohesive economic elite group that had dominated the scene with massive wealth and matching organizational capacity. But apparently the association was not intended by its founders to be an economic interest group per se. Particularly after the Karuki-ki-crisis, the political side of GEMA overshadowed its organizational potential to be a means to mobilize economic interests.

Admittedly, the constitutional power transfer could have not been taken for granted based only on the political economy factors described above. There was a critical exogenous factor that had tilted the balance in favor of constitution-based transition in the face of an otherwise indeterminate situation produced by the alignment of the political economy factors. That was the suddenness of the death of Kenyatta. After the transition had been over, the Moi government exposed some plans that were hatched to militarily prevent Moi from taking over the presidency.\textsuperscript{50} Although the systemic configuration had already assured the flimsiness of the plot in the first place, pure luck was also to take credit to some extent.

Reinforcing the effects of the systemic factors, the occurrence of the coffee boom in the year leading up to the transition was another exogenous component. Kenyatta's ability to incorporate new elites into the fold towards the end of his reign, predicated on a strategy of ensuring eventual stability, was fueled by patronage resources earned through the coffee windfall (Throup, 1987, pp. 49). There is also another twist to how the coffee boom might have affected the Kenyatta succession. Normally, the direct effect of the coffee boom would have overpowered the Kikuyu elites since earnings would be concentrated in the coffee-growing country of Central Province. However, in 1977/78, there was widespread smuggling of coffee from the then-dysfunctional Uganda to be exported out via the port of Mombasa. Such activities helped to spread around the benefits of the boom to elites in the rest of the country, especially in Western and Rift Valley districts bordering Uganda.

In the absence of an institutional foundation transcending the personality cult of Jomo Kenyatta, the political elites were not sure if their privileges would be preserved under

\textsuperscript{49} The most prominent example is the alignment of the highly influential Provincial Commissioner of Central Province, Simeon Nyachae, with the Vice President to dampen the effect of GEMA's campaign in his crucial jurisdiction.

\textsuperscript{50} Weekly Review, “Strange tales”, November 3, 1978
the next president. At the same time, no single faction was strong enough to circumvent the constitutional path. Given the prevailing fragmentation of economic organizations, the economic elites were not able to take advantage of the fragmentation of political organizations to shape the next presidency in their own terms. However, the point of crisis that forced the elites to resort to the rule of law would have not arrived if the Kikuyu hegemony had not fragmented. As per the characterizations of fig. 3, the failure in the conveyor belts linking political organizations was complemented by a critical fracture on the vertical conveyor belt binding the largest and most powerful ethnic group. Under those conditions, the elites had too much to lose to try the uncertain path of rewriting the rules.

c. The Moi succession

The political economy equilibrium in the 1980s Kenya was characterized by narrowly concentrated political organizations and relatively dispersed economic organizations. The reintroduction of multi-party politics in the 1990s contributed to some level of dispersion of political influence; but real political power stayed in the dominion of the ruling party anchored to the persona of Daniel arap Moi and his Kalenjin lieutenants. What happened to the organizational structure of the elites toward the end of the 1990s that ensured the transition against the status quo in 2002?

Political and economic interest groups of the late 1990s

Political interest groups

If there is one thing peculiar about Kenyan politics of the 1990s, it is the glaring lack of ideological distinction between the political parties even on Sub-Saharan Africa standards (Mueller, 2008). Moreover, the parties lacked grassroots mobilization since they remained the bastions of personality cult imbedded in ethnic allegiances. The same familiar names from the independence era, such as Oginga Odinga and Mwai Kibaki, reemerged as key opposition figures to dominate the political scene at least in the first half of the 1990s. Regardless of the coercive tendencies of Moi’s regime, the opposition parties themselves were already too fragmented. That is why Moi and his party, KANU, did not find it very difficult to win the first multi-party elections in 1992.

Some sort of learning curve kicked in among the opposition after the 1992 elections. It is true that political mobilization remained balkanized in ethnic enclaves. However, the opposition leaders scrambled to rectify their organizational deficiencies at the same time as they pushed for constitutional review to create a more level playing
field. One of the most important changes that came with the 1997 elections was the unification of the Kikuyu opposition behind Mwai Kibaki. Moi and KANU won the elections; but they did so with wafer-thin majority. Another change that had occurred in the inter-election period was the death of Oginga Odinga and the subsequent takeover of the leadership of the Luo by his son, Raila Odinga. Raila had been groomed sufficiently to assume the Luo leadership. But when it came to trans-ethnic appeal, Raila failed to fill his father's shoes. While his father had won at least 20 percent of the vote of two other ethnic groups in 1992 (on top of 95 percent of Luo's), Raila's support happened to be confined exclusively to his Luo bailiwick. This left the new heir vulnerable and, therefore, ready to teaming up with other ethnic leaders.

Capitalizing on the lessons of the last two elections, more consolidated opposition blocs emerged after 1997. The ruling party also appeared further entrenched, at least for a brief period, when it colluded with Raila Odinga's party in an unholy alliance bound by a common agenda on the constitutional review process. However, the very same process that seemed to have consolidated KANU's position was sowing the seeds of fragmentation deep inside the party structure. With Moi bound to retire at the end of that term and the cooption of Raila further complicating the issue of succession, the cracks in KANU started to show more prominently. Elected members of the party appeared ready to jump the ship as soon as they determined the prospect of future victory had switched. Nevertheless, “having learnt their lesson (from previous defections), most MPs now remained in their old parties, refusing to resign in writing to avoid losing their seats, but acted as if they had changed alignments, creating a situation of extreme confusion” (Hornsby, 2012, pp. 625). Most elected politicians were able to sit on the fence because they could easily realign themselves to a sub-coalition consisting of their ethnic communities in both the incumbent and opposition camps.

When Moi picked Uhuru Kenyatta as his successor, seven senior cabinet ministers including the vice-president, representing almost all the major ethnic groups, protested the decision publicly. Only two months before the 2002 elections, several splinter groups, including Raila's Social Democratic Party (SDP), deserted the KANU camp to join the opposition umbrella alliance. This move represented the decisive blow that finally brought KANU's four decade long rise to come to an end. Although the opposition managed to create a unified front against the incumbent, their coalition remained a marriage of convenience that was marred by de facto fragmentation of political interest groups. More importantly, the dissipation of power and patronage that had been previously held by KANU brought the political platform to significant fragmentation a few weeks before the elections were due.
Economic interest groups

Many students of Kenya's political economy agree that the first real split in the identities of the political elites and the economic elites occurred a few years after Moi took power. The wealthy Kikuyu were increasingly excluded from the ruling coalition as the less affluent Kalenjin and other Rift Valley politicians took their place. But the split did not last long. The new political elites began using state power to accumulate wealth and to build their own business empires on the side. However, they never tried any form of overt expropriation of the old economic elites. They somehow learned to live with each other. In the late 1990s, most of the super-rich Kenyans fell into one of three categories: the old money families of the 1960s and 70s (mainly Kikuyu, the most prominent of whom are the Kenyattas), African Kenyans who had made their money in the 1980s and 90s (mostly associated with Moi), and the Asian business community which still owned most of the manufacturing industry in Kenya (Hornsby, 2012).

There were no official associations such as GEMA (of the 1970s) to formally mobilize the influence of the business community at least within ethnic groups. But there were several business conglomerates linking the interests of economic elites across the above mentioned three groups. The tacit collusion between Moi's inner circle and some in the Asian business community was evident in the ‘Goldenberg scandal’ that saw hundreds of millions of dollars siphoned off from the central bank for fraudulent export compensation. Moreover, the Moi and Kenyatta families were believed to have been holding joint business interests in wide range of sectors from banking to transport and hotels (Hornsby, 2012). Therefore, it is fair to say that a growing concentration of economic interests was emerging towards the end of the 1990s particularly as some of the veteran politicians (including Moi himself) sought to retire from politics to run their businesses.

The political economy dynamics leading up to the democratic power transfer

In the run up to the 2002 elections, political organizations were quickly fragmenting and the direction of their momentum was still bound to further fragmentation at the time of the election. The fact that the opposition managed to pull off a superficial alliance was simply a de jure reaction to this momentum created by de facto forces. On the contrary, the economic elites had been consolidating their common ground gradually as the previously-vulnerable Kalenjin elites had already benefited enough from two decades of patronage to join the ranks. Hence, the incoming political elites were running the risk of being dominated by the outgoing government elites who would reappear in the guise of economic interest groups.
As my characterizations of the momentum of political and economic interests in the preceding paragraphs show, at the eve of the elections, Kenya was gravitating to a rent-seeking equilibrium marked by a nexus of fragmented political organizations and concentrated economic interests. But again, like in 1978, this trend was complemented by the fracturing of the ethnic ties among the Kikuyu elites. Under this configuration, trying to manipulate the existing rules would have been a risky bet. On top of that, there was already a ‘side-payment’ arrangement negotiated to compensate the potential losers out of the democratic outcomes. This arrangement consisted of the prospect of a new constitution as well as a memorandum of understanding signed between the two most powerful parties in the opposition alliance\textsuperscript{51}. Even the losing Rift Valley elites were comforted by the fact that they would still have a fair shake if they could somehow manage to influence the framing of the new constitution in favor of regional devolution like they had always tried to.

The economic elites (both veteran businessmen and retiring politicians) were confident that political organizations were already too fragmented to threaten their economic position even if things fall apart after the election. The most important one of the economic interest holders in the post-election era would be Moi himself. He could have used his trademark coercion to influence the elections in favor of Uhuru Kenyatta and KANU. Although there was subtle bias in the allocation of state resources favoring Uhuru’s campaign, Moi refrained from using his position and experience of electoral manipulation to rig the election. Even after the polls were closed, army generals were ready to stage a coup when they realized that Moi’s handpicked heir did not win the votes. But they were waved off by Moi himself who calculated that his interests would be better protected by letting the fragmented coalition take over (Wrong, 2009).

In both transitions, political competition was essentially reduced to intra-ethnic contest among the Kikuyu whereas the historically pernicious rivalry between the Kikuyu and the Luo had been ruled out. In 1978, the shadow power struggle among the Kikuyu factions saved the first transition. Later in 2002, competitive tribalism failed to thwart the transition mainly because the presidential competition happened to be between two Kikuyus. Besides, the Luo were aligned with one of the Kikuyu factions in 2002 while they were more or less neutral in 1978.

\textsuperscript{51} On October 22, 2002, NAK and the LDP signed a memorandum of understanding, thus creating NARC. The memorandum’s key provisions were that (Raila) Odinga would be appointed to the new post of prime minister and that cabinet posts would be divided “equally” between NAK and the LDP (Barkan, 2004, pp. 92)
v. Conclusion

Ethnic strife and elite capture have been portrayed as two of the most pernicious scourges on Africa’s development efforts. Kenya is one of the few African countries where elites dating back to the independence era have stayed on the public scene surviving though a tumultuous path of quasi-democratic politics mostly driven by ethnic currents. Kenya has so far managed to avoid outright civil war and successful coup d’états. But it has always flirted with lingering fragility bordered by resilient signs of natural state maturity. This paper has set out to examine the factors behind the persistence of ethnic allegiances as the most prominent basis of political and economic collective action. In a latter part of the paper, the commonly portrayed picture of a deeply divided society is contrasted with events in which the rule of law prevailed over ethnic allegiances, shedding light on cases where ethnicity could endogenously give way to other forms of collective action. The NWW framework of natural states coupled with traditional theories of identity and class has been used as a theoretical tool for interpreting the narrative and analyzing major historical patterns.

Commitment to the continuity of the institutional structure inherited from the colonial state has been the hallmark of Kenya’s political economy. Due to the presence of path-dependence in institutional change, the legacy of the colonial institutions persisted for a long time enshrined in elite interests. As the post-independence Kenyan elite preserved the state-capitalist mode of economic organization, they also stuck to ethnicity as the most viable form of political organization. This happened in spite of the growing class segmentation and the liberal stance taken by the more cosmopolitan elites who hailed from the relatively well differentiated ethnic groups during the founding of the post-colonial state. In the presence of substantial inter-group inequality such as the one that prevails in Kenya, it is shown to be difficult to promote other forms of collective organization over ethnicity. The persistence of ethnicity has strategic origins on top of structural reasons. The strategic advantage of maintaining ethnic segmentation emanates from the interest of the dominant coalition elites. As long as the elites use ethnic allegiances as their bargaining chips to secure their position in the dominant coalition, it becomes hard to override tribal firewalls even when the structural conditions are favorable for a more liberal organization of society. However, this ceases to be the case if the elites have individual traits that could be exploited more productively with a different type of collective structure than an ethnic one.

The fact that trans-ethnic alliances were instrumental in realizing the two events of orderly political transition Kenya has seen in its history so far bears testament to the importance of other forms of elite organizations connecting the ethnic segments. The most generic categorization of such organizations could be made in terms of political versus economic interest groups. It is shown in the extended theoretical framework
that the flow of rents within the dominant coalition is facilitated by the synchroniza-
tion of all the political, economic and ethnic organizations. The stability of the dom-
inant coalition is maintained through connecting the three sets of organizations like
the gears of a conveyor belt. Ironically, the constructive adjustments that the dominant
coalition in Kenya had undergone in 1978 and 2002 happened because some of the
crucial political and ethnic organizations were fragmented to the extent of driving
the whole coalition to extreme uncertainty. The fragmentation on both fronts was so
severe that the elites could not quickly regroup in their ethnic enclaves as they would
have done under normal circumstances. The rule of law was observed because the
elites could no longer afford to gamble by trying to rewrite the rules in the face of such
fragmentations.
# Appendix 1: Summary of political economy development and elite alignment

<table>
<thead>
<tr>
<th>Period</th>
<th>Identity of dominant coalition elites</th>
<th>Sources of rent and patronage</th>
<th>Major dynamics in the political sphere</th>
<th>Major dynamics in the economic sphere</th>
</tr>
</thead>
<tbody>
<tr>
<td>1963 – 1970</td>
<td>Educated African technocrats linked to the colonial system</td>
<td>Land left by colonial settlers, public sector jobs left by expatriates, foreign aid (esp. British)</td>
<td>Ideological competition, political consolidation</td>
<td>Freeing up of productive potential, beginning of indigenous accumulation</td>
</tr>
<tr>
<td>1971 – 1975</td>
<td>Consolidated independence era politicians, the nouveau riche</td>
<td>Allocation of capital by state banks, trade licenses and distribution privileges</td>
<td>Centralized presidency, institutionalized autocracy</td>
<td>Emergence of strong business elites, continued dependence on state patronage</td>
</tr>
<tr>
<td>1976 – 1981</td>
<td>Allies of former vice president Moi, second generation and more affluent MPs</td>
<td>Parastatal revenue, allocation of public and trust land (mostly illegal)</td>
<td>Presidential transition, continuation of the status-quo</td>
<td>Economic strains, end of the era of ‘soft options’</td>
</tr>
<tr>
<td>1982 – 1991</td>
<td>District level KANU officials, some Asian Kenyans</td>
<td>Structural adjustment loans and foreign aid, marketing boards and parastatals</td>
<td>Abortive coup, autocratic consolidation, shift to a party state and regionalism</td>
<td>Realignment of business elites with Asian Kenyans joining the patronage network, structural adjustment program</td>
</tr>
<tr>
<td>1992 – 2001</td>
<td>The same elites as in the previous decade</td>
<td>Large scale political corruption**, redistribution away from surplus regions</td>
<td>Multi-partyism, political fragmentation, elevated ethnic tensions</td>
<td>Economic stagnation, large-scale political corruption</td>
</tr>
<tr>
<td>2002 – 2007</td>
<td>Combination of veteran Kenyatta day politicians and young opposition members</td>
<td>Foreign aid, large scale political corruption***</td>
<td>Democratic transition, coalition collapse, privatization of violence</td>
<td>The reemergence of old economic elites</td>
</tr>
</tbody>
</table>

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*Kimabu is the home district of the first president, Jomo Kenyatta

** The Goldenberg scandal for instance

*** Anglo-leasing scandal for instance
Appendix 2: Historical fluctuations of output in Kenya (Real GDP per Worker)

Source: Heston, Alan, Robert Summers, and Bettina Aten. 2011. “Penn World Table Version 7.0.” Center for International Comparisons of Production, Income and Prices at the University of Pennsylvania
Appendix 3: Relative importance of exogenous factors as determinants of income in Kenya

<table>
<thead>
<tr>
<th>Dependent variable: ln of real GDP per worker</th>
<th>Estimation method: AR (1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spring rainfall (t-1)</td>
<td>.0004*** (.0001)</td>
</tr>
<tr>
<td>International coffee price (coffee arabica)</td>
<td>.0023 (.0100)</td>
</tr>
<tr>
<td>International energy price index</td>
<td>.0003 (.0004)</td>
</tr>
<tr>
<td>Log likelihood</td>
<td>77.14 76.74 77.18 78.14</td>
</tr>
<tr>
<td>Number of years</td>
<td>39 41 41 39</td>
</tr>
</tbody>
</table>

Standard errors are shown in bracket. Triple asterisk means 1 percent statistical significance.
CHAPTER THREE – UNITED WE STAND, DIVIDED WE HUDDLE

References


Barkan, Joel D. 2004, “Kenya after Moi.” Foreign Affairs, January/February, pp. 87-100


Institutional change in the long shadow of elites

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McAll, Christopher. 1990. Class, Ethnicity, and Social Inequality: McGill Queen’s University Press


Wrong, Michela. 2009. It’s Our Turn to Eat: Fourth Estate.
Institutionele wijziging
van de lange schaduw van elites

 Essays over instellingen, Human Capital en etniciteit in ontwikkelingslanden

Samenvatting van het proefschrift

In dit proefschrift onderzoek ik het verband tussen het niveau en de verdeling van het menselijk kapitaal en de institutionele veranderingen in samenlevingen waar elites bevoorrechte toegang tot politieke en economische organisaties hebben. Om te begrijpen waarom elites deze voorrechten in samenlevingen kunnen behouden bestudeer ik de sociale en institutionele fundamenten die kunnen bijdragen tot de dominantie van elite in een bepaalde samenleving. In bijzonder analyseer ik de bevinding dat elite vaker langer een dominante positie kunnen behouden in etnocentrische samenlevingen door te kijken naar de invloed van vroege instituties op het politieke belang van etniciteit. Het proefschrift bestaat uit drie essays die deze vragen vanuit verschillende hoeken benaderen met behulp van verschillende theoretische en empirische methodes.

De doelstelling van het eerste essay is het onderzoek naar het effect van de verdeling van menselijk kapitaal tussen de politieke en economische elite groepen op het verkrijgen van stabiele eigendomsrechten. Het essay probeert te onderzoeken of relatief beter opgeleide politieke elites stabiele eigendomsrechten meer bevorderen dan lager opgeleiden elites. Een eenvoudig model van endogene eigendomsrechten laat zien dat de opkomst van een niet-roofzuchtige staat een functie is van de verdeling van het productieve menselijk kapitaal van de elites. Het model maakt gebruik van de veronderstelling van de complementariteit tussen kapitaal en vaardigheid om uit te leggen waarom het in het belang van beter opgeleid politieke elites kan zijn om zich committeren aan het respecteren van eigendomsrechten. Wanneer het aandeel van het menselijk kapitaal van politieke elites hoog is, maar niet te hoog, ontstaat er een niet-roofzuchtige staat die investeringen in de formele sector aantrekt. Wanneer het menselijk kapitaal van de politieke elites de roofzuchtige capaciteit vergroot en het productiepotentieel verbetert, zou de politieke elites sterkere institutionele concessies moeten toelaten als hun aandeel in menselijk kapitaal toeneemt. Ervan uitgaande dat er, als alternatief voor de formele sector, een informele sector is die beschermd is tegen
een roofzuchtige staat, dan kan een hoger rendement in deze informele sector kapitaal aantrekken dat anders bestemd zou zijn voor de formele sector. Dit zou de drijfveer voor het oprichten van eigendomsrechten elimineren.

Het theoretisch model dat hierboven is beschreven is geïnspireerd door de evolutie van eigendomsrecht instituties in twee landen die verschillende wegen hebben bewandeld nadat, in een kritiek moment in hun geschiedenis, de politieke en economische elites werden gesplitst. Deze landen zijn Maleisië en Zimbabwe. De stabiliteit van de eigendomsrechten in Maleisië is een gevolg van een goed opgeleide aristocratie die de macht in handen heeft genomen na de onafhankelijkheid en hierna een aandeel in het kapitalistische systeem van de productie heeft opgeëist. Daartegenin, kan de ondergang van de Zimbabwaanse economie en de vernietiging van eigendomsrecht instituties deels worden toegeschreven aan de historische ongelijkheid in het menselijk kapitaal van de blanke minderheid en de zwarte meerderheid. De ongelijkheid in het onderwijs werd verergerd door de direct beschikbare ‘exit’ opties die door Zuid-Afrika en Groot-Brittannië werden voorgelegd aan opgeleide blanke Zimbabwanen.

Het tweede essay onderzoekt de bredere empirische relatie tussen onderwijs en eigendomsrecht instituties. De econometrische opzet probeert om het probleem van de tripartiete causaliteit tussen instituties, inkomen en menselijk kapitaal aan te pakken door te controleren voor het niveau van inkomen in voorgaande jaren en het interactie-effect tussen inkomen en onderwijs. Een belangrijke contributie van het essay is de constructie van een nieuwe samengestelde index die eigendomsrechten meet; deze index is gebaseerd op een set van veel gebruikte indicatoren. Zoals verwacht heeft onderwijs een positieve invloed op eigendomsrechten. Een meer interessant resultaat is dat deze relatie niet lineair is. Een verbetering in het onderwijs helpt landen in de onderste en bovenste strata van het gemiddelde opleidingsniveau marginaal meer om hun eigendomsrechten te verbeteren dan de landen die een gemiddeld onderwijs niveau hebben. Hoewel onderwijs statistisch meer significant is dan inkomen in de meeste specificaties, is het effect van onderwijs afhankelijk van de hoogte van het inkomen van een land. Landen met lage inkomens kunnen de eigendomsrechten destabiliseren door toegang tot onderwijs te verbreden, tenzij het inkomen gelijkmatig kan groeien met het niveau van menselijk kapitaal. Wanneer het gemiddelde opleidingsniveau niet te laag is heeft de ongelijkheid in menselijk kapitaal geen negatief effect op eigendomsrecht instituties. Instrumentele variabele analyse toont aan dat het effect van onderwijs op eigendomsrechten meer zichtbaar is wanneer onderwijs wordt gemeten als het onderwijs niveau van de minst opgeleiden 60 procent van de bevolking. De dynamische panel schatting van de relatie laat zien dat er een vertraagd positieve effect is van een verhoging van het menselijk kapitaal van de minst opgeleiden 60 procent van de bevolking op eigendomsrecht instituties.
Het derde essay geeft inzicht in de verklarende factoren van de dominantie van elite die invloed hebben gehad op de politieke en economische instituties in de meeste ontwikkelingslanden. Etnische allianties wordt aangeduid als een dergelijke factor. In het essay wordt onderzocht waarom het gebruik van etnische allianties aanhield als de meest dominante methode waarmee de elites een collectief optreden in Kenia organiseerden. Deze methode is meer gebruikt dan alternatieve vormen van mobilisatie zoals klasse. Kenia is geselecteerd voor de casestudy omdat het, in tegenstelling tot de meeste andere landen in Afrika, beschikt over een post-koloniale geschiedenis die beschreven is door de gevolgen van de elite dominantie en etnische spanningen ondanks dat Kenia een kapitalistisch economisch model heeft. Vergeleken wordt het vaak destabiliserende effect van een prominente aanwezigheid van etnische contrasten met de trans-etnische samenwerking wat de basis vormde voor twee vreedzame presidentiële overgangen in Kenia voor het jaar 2013. Dit contrast is gelijksoortig met de intrigerende coëxistentie van de ontwikkelde politieke regeling en de kwetsbaarheid in Kenia.

De resultaten tonen aan dat concurrerende tribalisme is blijven bestaan onder toezicht van omvangrijke contrasten in klasse omdat initiële inter-groep ongelijkheden de politieke saillantie van de stijgende individuele ongelijkheid hebben ondermijnd. De sterke economische groei van de eerste decennia sinds de onafhankelijkheid heeft de etnische sentimenten niet verzwakt omdat sommige etnische groepen meer economische winst hebben behaald dan anderen. Bovendien, de vroege instituties van het land werden ontworpen op zodanige wijze dat de stabiliteit van de regerende coalitie zou afhangen van het vermogen van de elites om etniciteit te gebruiken om hun positie te verzekeren. Niettemin zijn twee presidentiële overgangen gefaald in het schepen van een trans-etnische samenwerking omdat sommige van de meest belangrijke etnische organisaties gefragmenteerd waren. Geconfronteerd met politieke fragmentatie en onzekerheid hebben de elite gekozen om het risico van intra-elite crisis te minimaliseren door toevlucht te nemen tot het eren van de rechtsstaat. Al met al hebben historische instituties en de bijbehorende verdeling van de middelen de huidige institutionele instituties beïnvloed door het strategische gebruik van etniciteit van de elite om collectieve actie te mobiliseren.
Short biography of the author

Biniam Egu Bedasso was born in Assela, Ethiopia on October 4, 1981. He completed his high school education in Hawas Comprehensive Secondary School in 1998. Mr. Bedasso holds a Bachelor of Arts degree in Economics, awarded with distinction, from Addis Ababa University. He has been awarded the Mekonnen Tadesse Memorial Award for the best B.A. thesis in Economics by the Ethiopian Economic Association. In 2006, he received a Master of Science degree in Economics from University of Copenhagen, Denmark. He has written a master’s thesis on human capital investment and labor markets in Ethiopia for which he received the “exceptionally excellent and independent” commendation. Mr. Bedasso has worked for the Ethiopian Development Research Institute (EDRI) and the United Nations Economic Commission for Africa (UNECA) as a researcher after completing his postgraduate training. Over the course of his doctoral research, Mr. Bedasso has received fellowships and grants from the European Center for Development Policy Management (ECDPM), Agence Française de Développement (AFD) and The World Bank. He is currently working at Economic Research Southern Africa (ERSA) in Cape Town, South Africa.
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