Traditionalism, Institutions, and Rational Bargaining in Sub-Saharan African Civil Conflict

Joseph Anthony Jastrzembski
University of Texas at El Paso, jajastrzemb@gmail.com

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TRADITIONALISM, INSTITUTIONS, AND RATIONAL BARGAINING IN SUB-SAHARAN AFRICAN CIVIL CONFLICT

JOSEPH ANTHONY JASTRZEMBSKI

Department of Political Science

APPROVED:

______________________________
Charles R. Boehmer, Ph.D., Chair

______________________________
Cigdem Sirin, Ph.D.

______________________________
CharlesAmbler Ph.D.

______________________________
Benjamin C. Flores, Ph.D.
Dean of the Graduate School
TRADITIONALISM, INSTITUTIONS, AND RATIONAL BARGAINING IN SUB-SAHARAN AFRICAN CIVIL CONFLICT

by

JOSEPH ANTHONY JA STRZEMBSKI, Bachelor of Liberal Arts

THESIS

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Abstract

When many speak of Africa, they convey a narrative that portrays a continent haunted by ethnic conflict. However many countries are both highly diverse and relatively stable, such as Botswana or Tanzania, and we find that inter-ethnic cooperation is far more common place than conflict. In this thesis I argue that cultural differences between ethnic groups are not the cause of ethnic civil war, rather, the mechanisms find their root in economics. To explain ethnic conflict on the continent, I examine the self-interested behavior of bargaining groups in society, where ethnic communities act more as an interest group and less as a people, and the delegation of political mobilization through ethnic and personalist ties by the executive in government to local notables, reduces the likelihood of peaceful conflict settlement. Furthermore, I also describe the ways government institutions can alleviate this problem. To this end, this thesis seeks to examine how the self-interested behavior, of three elements in society, the traditional elite, the executive power, and the economic elite, in a relationship defined by political survival and goods distribution, can lead to mechanisms that hinder the ability to reach negotiated settlement in conditions comparable to rationalist explanations for war we can find in the international system.
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Chapter 1: The Executive, Tribal Elite, Educated Elite, Interest Groups and Principal-Agent Theory

When many speak of Africa, they convey a narrative that portrays a continent haunted by ethnic conflict. Primordial and “Clash of Civilization,” approaches suggest a never ending spiral of fear, rancor, paranoia, and the inevitable failure to overcome the apparition of brutality past (Huntington, 1996). But if this were true, we would not have seen rapid growth and prosperity in Kigali, nor a lack of civil war in countries both highly diverse and relatively stable, such as Botswana or Tanzania. Furthermore, we have numerous cases where ethnic groups had no quarrel before colonization, and tribal or ethnic groups with territories that cross borders may feud in one nation, but not the other (Posner, 2004).

Most works examine tribal or ethnic groups in terms of cohesive units bound together by a common identity or some sort of cultural affinity. The absence of power-sharing agreements, or when one ethnic group intentionally excludes others from power, can create substantial cleavages that, in instance of poor state capacity, can increase the likelihood of conflict (Cederman et al 2010). Conversely, going beyond the near-general consensus that nothing inherent in ethnolinguistic fractionalization breeds conflict, Elbadawi and Sambanis argue it can even increase stable development because it requires inter-group bargaining (2000). Pointing out inter-ethnic cooperation is far more common place than conflict Fearon and Laitin use the game theoretic bargaining approach to demonstrate that negotiations between ethnic groups generally

1 Though Rwanda has experienced rapid and peaceful growth, it would be remise to say the government Tutsi dominated government is not still rife with ethnic tension, though mentioning the ethnic divisions or mobilizing around them is illegal. Furthermore, the territorial dimension of this thesis’ discussion does not really apply to the Rwandan example.
result in Nash equilibrium, particularly when facilitated by institutions (1996). Yet, the power structures that emerged during colonialism led to a modern context where many tribal and ethnic groups behave less as a people, but more as interest groups (Kimenyi, 1989). In this sense, traditional tribal or religious leaders act as representatives of interest groups and local politicians. Also, executive leaders in many countries rule indirectly by delegating tasks to traditional leaders instead of relying upon a consolidated professional bureaucracy, and mobilize politically around ethnic groups, instead of political parties. This conceptualization allows us to analyze inter-ethnic and inter-tribal relationships within the framework of rational bargaining models. Though tribes and ethnic groups may act as interest groups in many countries, not all politically mobilize around ethnic identity. In this thesis I argue that cultural differences between ethnic groups are not the cause of ethnic civil war, rather, the mechanisms find their root in economics. Thus, we are left with an important research inquiry: how does the self-interested behavior of bargaining groups in society, and political mobilization through ethnic and personalist ties, reduce the likelihood of peaceful conflict settlement, and how can government institutions alleviate this problem? To this end, this thesis seeks to examine how the self-interested behavior of three elements in society, the traditional elite, the executive power, and the economic elite, in a relationship defined by political survival and goods distribution, can lead to mechanisms that hinder the ability to reach negotiated settlement in conditions comparable to rationalist explanations for war we can find in the international system (Fearon, 1995).

Using formal bargaining models Fearon (1995) shows the high risk and cost of war creates strong incentives to reach negotiated settlement ex ante (prewar). The argument relies on differentiating ex ante efficiency from ex post efficiency, as war always entails costs, even if states anticipate the expected benefits of conflict to outweigh initial costs. If the same benefits can be
procured through negotiated settlement *ex ante*, then war becomes irrational from a profit maximization viewpoint. Extending this theoretical framework to power structures in post-colonial states can contribute to two of Fearon's (1995) plausible candidates for preventing *ex ante* negotiation, namely commitment problems and strategic, or economically important, territory. The first step in doing this is to demonstrate that base assumptions of a work that describes interactions between states also holds utility within borders.

The remainder of the first chapter seeks to establish these base assumptions, namely weak government capacity as analogous to anarchy. It then seeks to establish the bargaining groups in society, the traditional elite, the economic elite, and the executive, based on Joel Migdal's (1988) analysis. Next, I work to develop the traditional elites' behavior as representatives of interest groups, and the executive and traditional elite's principal-agent relationship. This is key, because without this, the thesis would not adequately demonstrate that Fearon's (1995) work concerned with the international system can also be applied within a country's borders. The second chapter focuses on the role traditional elite's self-interested behavior, the principal-agent problem between the executive and traditional elite, and the exclusion of the economic elite from power-sharing, in reducing inter-ethnic credibility of commitments. Finally, the third chapter examines how delegating the task of political mobilization to the traditional elite can create horizontal inequalities between ethnic groups resulting from under-provision of public goods to the territories represented by traditional leaders not delegated with political mobilization. This gives certain territories within a country disproportionate economic valuable, and can be considered strategic territory, another of Fearon's (1995) mechanisms. Lastly, the third chapter also considers a future research agenda to further test this theoretical framework, and policy prescriptions to help alleviate the problems examined in these initial results.
1.1 Government Capacity and Anarchy

The literature largely agrees that a lack of government capacity represents the main determining factor in whether a country is susceptible to civil war. Collier and Hoeffler (1998) and Fearon and Laitin (2003) point to a lack of government capacity as the primary explanatory variable in civil conflict. Studies show that wealth and economic growth contribute to regime stability (Przeworski et al, 2000, Dixon, 2009). Similarly, the literature also considers a state's administrative capacity and the strength of its institutions. States with established autocracies have the administrative and institutional to quell civil strife, and established democracies have strong institutions designed to help create negotiated settlement. States in the middle ground, lacking the capacity to completely suppress unrest, and wanting for strong institutions to facilitate peaceful negotiated settlement, hold the greatest risk of civil war (Hegre et al, 2001).

The anarchic nature of the international system is often cited as the single qualitative difference between the domestic politics of states and international relations (Waltz, 1959). Just as Fearon notes anarchy within the international system, in of itself, does not adequately explain war in lieu of the increased efficiency of \textit{ex ante} negotiation, neither does a state's weakness explain why elements in society would wage civil war rather than negotiate a more efficient outcome (1995). A near constant in political theory since Max Weber (1911) is the definition that the state holds a monopoly on the legitimate use of force within its borders. In practice, it is a privilege, itself, only ensured by the state's own capabilities of enforcement. Thus, this work, treats a weak, ineffective government, not as an explanatory variable, but rather, as a base assumption, analogous to anarchy in the international system. Making a similar observation, Nicolas Sambanis (2001) notes that though state failure resembles anarchy, neorealism is ill-
equipped to explain ethnic group mobilization and other puzzles. In *Strong Societies and Weak States*, Joel Migdal (1988) argues:

“Somehow focus of attention on centerstage in so many books and articles seemed to take as a given what I found so open to question: the issue of the autonomy and strength of the state... These authors have either dismissed the state entirely outside Europe and North America, talking at times of stateless or nonstate societies, or else they have developed notions of autonomy extended fairly indiscriminately to Third-World cases.”

In the many ways, the study of civil war bridges the gap between international relations and comparative politics: civil war scholarship seeks to create theory generalizable across states, yet, implicitly, the state is not the primary unit of analysis. Because of this, relevant political actors within a country, specific political institutions, resources locations and distribution, and spaciality, all become important. Thus, any mechanism or actor that contributes to the likelihood of civil war cannot be aggregated at the national level.

1.2 Tribes and Ethnic Groups as Interest Groups and Agents

The genesis of the ethnic politics we see in Africa today arises more from the colonization period than from ancient culture. To define ethnicity, I employ Horowitz' (1985) inclusive definition, which “easily embraces groups differentiated by color, language, and religion; it covers ‘tribes,’ ‘races,’ ‘nationalities,’ and castes.” Often colonizers strategically privileged some ethnic groups over others economically, facilitating asymmetric levels of human capital and administrative ability. Migdal (1988) notes in Sierra Leone, the British pursued a strategy of ruling by delegating governing functions to “traditional chiefs.” In some cases, such chiefs had no traditional history at all, but were merely “tribal strongmen” bestowed with the title.
(Migdal, 1988). Furthermore, no traditionally agreed upon territorial boundaries informed what land each chief controlled, rather the British divided the map according to their interests. Purposeful fractionalization helped ensure that no one unified group would challenge British control. Migdal (1988) writes: “their goals of stability and security could be better achieved thorough policies that created and perpetuated a fragmented, weblike society with numerous poles of power, even though such a society posed formidable constraints on mobilization of human and material resources (1988).” Even as late as the 1980's, some African leaders made efforts to decentralize their countries, and delegate more administrative duties at the local level (Chege and Barkan, 1989). In an e-mail correspondence on May 19, 2013, Charles Ambler shared a description of the historical origins of modern ethnic politics in Africa:

“African countries are characteristically comprised of territorially distinct ethno-linguistic communities—typically referred to as tribes or as ethnic groups. In recent decades as African countries have rapidly urbanized and as the middle classes have expanded dramatically, this situation has become complicated. Nevertheless, ethnic or tribal affiliations still tend to dominate politics in African countries and to dominate popular identity. These affiliations are nevertheless contingent. They are rooted in shared historical experience but given specificity by historical circumstances and immediate situation. The contemporary map of Africa is the product of imperial expansion. The 'Scramble for Africa' that occurred after 1880 divided the continent into colonial territories that evolved into today’s states. Those acts of conquest and division incorporated culturally and linguistically diverse peoples within new boundaries, and sometimes drew boundary lines that divided peoples. This state-building created the context within which modern 'tribalism' or ethnicity could develop and evolve.”
Because of this history, it logically follows that cleavages between ethnic groups rise from economic disparities, rather than cultural incompatibility. Migdal (1988) describes three politically important groups in weak states, “the executive,” “strongmen,” and the “bureaucracy.” Adopting his grouping, but not his nomenclature, I will refer to these groups as the executive, the traditional elite, and the economic elite respectively. The executive includes the politicians or political elite that govern a country at the national level, or representatives of the state. Traditional leaders are local leaders whose authority finds its origin in the colonial period and generally represent one tribal, religious, or ethnic group. The economic elite can be the burgeoning middle class in many African countries, but also wealthy individuals from non-African origin such as Creoles in Sierra Leon or and Indians in Kenya and Tanzania whose homeland or territory of origin is not in the country itself.

For the sake of parsimony I adopt Migdal's (1988) categorization, but must include a caveat, those I describe economic elites, traditional elites and the executive can overlap considerably. For example, Catholic monastery in Hanga village in the Ruvuma province of Tanzania, a community of roughly 3000 people, administers the majority of tasks we might expect to see performed by local government in an American city. For example, the village has no police force, rather, the monastery hires private security guards. The monastery also receives a lucrative government contract providing eggs for the Tanzanian military. The term strongmen stirs connotations of warlord or some sort of oppressive overlord, a trait we hardly associate with a group of Benedictine monks. Within the village, jobs, scholarships, and contracts, and other means to financial and material gain, may resemble family or tribal patronage. Also, many of the monks hold advanced degrees from American or European universities, and show strong entrepreneurial initiative.
Many believed that upon independence what I call the economic elite, would displace traditional leadership; however, it became extremely difficult for the economic elite to wrestle control and duties, such as judicial functions and taxation, from the chiefs whose fore-bearers received the tasks from the British colonial government. We can see some of these tensions still existing in Kenya's 2013 election. As reported by NPR, a Kenyan corporate lawyer observes:

“There are two competing facts in the narrative of Kenyan politics. One is that once someone goes into a voting booth, they vote tribally. They pick a person from their ethnic group and from their ethnic community. That's the bias that we always have had historically in every election we've been through as a country," she says. "The other fact is that Kenya as a country is more prosperous and better educated than ever before. If the middle class were a tribe, they'd actually be the biggest tribe in this country (NPR, 2013)."

As to why the economic elite did not supplant the traditional elite, Midal's (1988) discussion of the executive, tribal strongmen, and bureaucracy, political survival remains extremely important to the relationship between the three groups. State leaders may desire to build institutions to effect social control over the population, although, they have little guarantee these agencies will be beholden to them. By over-delegating powers, they raise the threat to their own political survival, through extra-constitutional means or otherwise by crippling their own levels of social control. In numerous locations, this situation has resulted in what Migdal calls a “triangle of accommodation.” In this, three groups, the executive power, the economic elite, and the traditional elite each share a portion of social control. The executive hesitates to completely replace the traditional elite fearing the risk of potentially creating a technocratic Pretorian Guard, in the form of a strengthened bureaucracy, or a class of elites pushing for a greater level of
democratization. The economic elite, rely financially on patronage from the executive in exchange for support. When we speak of traditional leadership as actors, we must remember that roles delegated to ethnic groups, and territorial boundaries, were often, institutionalized before independence, albeit extra-constitutionally. This is relationship is defined by political survival. The executive relies, primarily, on the traditional elite for political mobilization in many countries, and without their support, a continued position of power would be impossible. In exchange, traditional leaders receive public and private goods as reward for their efforts. To remain in favor themselves, the traditional elite must redirect resources to their own ethnic group. Thus, ethnic groups begin to act as interest groups, and therefore representatives of this group survive politically by redirecting resources to their group. If an executive employs a political party for mobilization, capital provided by the economic elite becomes critical. Evidence suggests that depoliticization of access to capital increases the likelihood multi-ethnic coalitions will form. However, when the executive acts as a “gate keeper” to capital, the economic elite are unable to play a role in multi-ethnic coalition building, (Arriola, 2013). When engaging in bargaining, ethnic groups act like interest groups and are lead by traditional leaders that find their beginnings in the colonial restructuring of political and human capital, territory, and administrative duties.

The literature often explains the lack of explanatory power for ethnic fractionalization variables by acknowledging that not all ethnic groups are politically relevant. Posner (2004) notes cultural differences become important if the size of the ethnic or tribal group is large enough to matter in building a political coalition. These cleavages are exploited as a politically mobilizing force in this case. The relationship between the Chewa and Tumbukas peoples are antagonistic in Malawi, but is characterized by cooperation in Zambia. A great deal of this results
from the need for Chewa and Tumbukas to band together to procure part in power-sharing agreements in Zambian politics, but in Malawi, the tribes are the main opposing power-holding groups (Posner, 2004). Size alone does not make a tribe important because also the patterns of influence and dependence in a country may favor relatively small groups. Instead of appealing directly to ethnic groups, in many countries, such as a case example from Senegal, national leaders turned to local leadership for mobilization (in particular, religious leaders) (Koter, 2013). When an ethnic group is large, and its influence becomes important to creating power-sharing agreements, then it can act as an interest group, using its leverage to pursue its agenda. Unlike other interest groups, such as, trade unions, inclusion in a ethnic group depends on blood ties, accordingly Kimenyi (1989) characterizes tribes as “permanent interest groups.” Interest groups, by definition, seek to redirect resources to their own members, which creates competition between ethnic groups for control of wealth transfer (Kimenyi, 2006). Tribes that have been delegated powers by the executive and exercise agency will generally receive financial gain through rent-seeking behavior, patronage, corruption, or favoritism for government contracts and pork-barrel projects. Most large ethnic groups act as interest groups, although, not all have been delegated powers by the executive. This creates horizontal inequalities between those engaged in a principal-agent relationship and those who are not, which can create inter-ethnic cleavages. Moreover, the executive may find itself experiencing the principal-agent problem with those traditional leaders responsible for administrative tasks. In effect we have the executive power in government acting as principal delegating powers to what Migal refers to as “tribal strongmen”, to act as agent on their behalf. According to the principal-agent model, often applied in political science, public administration, economics, and other fields, the principal delegates powers to an agent when the agent the principal is unable to complete a task on its own, or the agent could do
so more effectively. This relationship can take many forms: voters delegating agency to legislators, shareholders delegating control to a CEO, a president delegating tasks to its cabinet. The principal chooses the agent for their specialized knowledge, and though the principal has a hierarchical relationship with the agent, because of information asymmetry, the principal can never truly check all of the agent's behavior. The principal must also provide some sort of compensation or incentive to acquire the agent's service and ensure its loyalty. This leaves the relationship between executive powers and tribal leadership subject to the Principal-Agent problem, namely when the two have different interests, and information asymmetries, then there is no assurance that the agent will act in the principal's interest (Laffont and Martimort, 2001). Also, contributing to this difficulty, we see horizontal inequalities between the ethnic groups themselves, largely stemming from the amount a ethnic group profits from its principal-agent with the executive.

Though in reality, traditional elite, the executive, and economic elite can be hard to distinguish, but this does not preclude utility in a rational approach or the adoption of this categorization. Returning to our example of Hanga monastery, we are reminded the principal-agent relationship can also have varying degrees of formality. The Tanzanian government clearly delegates the task of local administration to the monastery, and in return it receives government rewards in return, but there is less of a legal or constitutional delegation of power, rather, one much more de facto. Regardless, the delegation of political duties and tasks, particularly political mobilization, to traditional leaders by the executive, and the general exclusion of the economic elite from this position, provide us with how ethnic politics can contribute to rationalist explanations for the breakdown of negotiated settlement.
1.3 Delegation to tribal and ethnic groups and commitment problems

In instances where the executive lacks capacity, or has delegated judicial tasks to traditional leaders, it has little in the way of the faculties required to ensure credibility of commitments. Moreover, the failure of the executive to prevent political violence further erodes trust in government institutions. In this case, traditional elites will gain a higher level of social control within their areas of jurisdiction. Despite their strong ability to make credible commitments within their own ethnic group, they have a weaker ability to make credible commitments to other groups than government institutions would. In cases where no grassroots political party organization exists, politicians seek support from ethnic and religious leaders, hoping to take advantage of their local connections and the preexisting channels of dependence. The level of mobilization delegated to local leaders depends on their power and that of their ethnic group, (Koter, 2013). In this regard, politicians may not be able to retake power delegated to locals due to the specific local knowledge the traditional elites hold. Thus, a principal-agent problem manifests. Intermediaries are important for their ability to deliver votes, largely due to weak political parties, and in return there is both the potential for personal material gain, as well as public works projects for their area. Because of the personal interest of local notables, if a politician from a different group offers them a better deal, they are likely to take it (Koter, 2013). However, this hinges upon trust in the credibility of their commitment. Haybarimana et al (2007) do not find evidence that co-ethnic cooperation occurs due to similar preference in public good types or a value in the well-being of co-ethnics over other groups. Instead, co-ethnics cooperate because they share and follow common in-group reciprocity norms. The results suggest increased interaction offers the opportunity to build reputation, and thus making commitments credible, allows for inter-ethnic cooperation (Haybarimana et al, 2007). This presents an
enormous problem in non-reiterated scenarios for challengers, whose commitments do not have the credibility of established leaders. If they hope to gain power, they rely more heavily upon their own ethnic group, lacking the credible reputation to reach out to others.

Intermediaries, as Koter (2013) puts it, or traditional elites as agents, have the ability to credibly threaten defection. Traditional elites acting as agents of the executive also have incentives to misrepresent their dissatisfaction or need in negotiations with the executive, as they could try and leverage more from patronage, rent-seeking, and other agreements such as pork-barrel projects. Without strong government institutions, such as an impartial judiciary, this causes the principal-agent problem to manifest. We can consider patronage and delegation of powers a form of signaling used to ensure loyalty to the governing regime, but it is less efficient than the credibility to commitments ensured by strong government institutions. As an executive attempts to expand their coalition by delegating more power, it weakens the strength of its governing institutions.

1.4 Delegation to tribal and ethnic groups, horizontal inequalities, and strategic territory

When the literature considers economically or strategically important territory, it refers to valuable resources, primarily specific commodities, oil, diamonds, agricultural goods, and contraband (Ross, 2004, Humphreys 2005). As most countries in developing nations derive income from natural resources and agricultural produce, control of these resources presents a intuitive candidate for a variable in civil war. Aside from resources, inequitable distribution of wealth and power amongst ethnic groups can provide a mobilization force that can generate the sort of large-scale participation required to cross the threshold to civil war from lower levels of political violence (Cederman et al, 2011). However, the proceeds agent-tribes receive from the
executive do not always take the form of liquid capital from resources rents.

Cederman et al's (2011) arguments regarding wealth income distribution, remain convincing, but patronage, clientelism, and rent-seeking behavior do not just result in income inequalities, but also in a vastly different allocation of public services. The executive's delegation of power, and the resulting increase of wealth, can leave schools, roads, electrical grids, hospitals, and other important infrastructure and public services asymmetrically concentrated in the geographic areas where the agent-tribes reside. Furthermore, because of the principal agent problem, pork-barrel projects may be purposely delayed or over quoted and the money for these projects are easily misappropriated, particularly when the party entrusted to keep order is the one embezzling funds. Such projects, create job opportunities for both skilled and unskilled labor, something sorely lacking in many areas. Numerous countries have great disparities in infrastructure and public services between different geographic locations. Nigeria's south has more developed infrastructure and Tanzania's north as well. Better roads exist in Bemba and Nianga territories in Zambia, and poorer roads in Lunda. This leads to vastly uneven quality of life, levels of human capital, and economic opportunity. In this way, the principal-agent relationship can turn horizontal inequalities into indivisible and economically important territory.

In both credibility of commitments and important territorial region, and their association to inequalities caused by the principal-agent relationship, quantitative analysis can help us support these causal mechanisms. In the case of credibility, survey data regarding trust, a crucial element in making commitments credible, can shine light on these matters. In the case of distribution of public services, cross-sectional data more appropriately addresses the mechanisms.
Chapter 2: Credible Commitments and Inter-Ethnic Bargaining

In this section, I will develop a theoretical explanation for how interest group behavior and the principal-agent problem reduce the ability of the executive and the traditional elite to make credible commitments for purely rationalist reasons. In order to test these hypotheses, I employ logistical regression to examine how a number of demographic characteristics and nation-wide conditions contribute to an individual's trust in the executive and the tribal elite. Trust provides an effective proxy for whether or not people find a commitment credible, as without strong government institutions to ensure enforcement, a political actor's reputation and past behavior establishes their reliability. This approach emphasizes that the mechanisms hindering negotiated settlement are not rooted in culture at all, but within a rationalist framework.

Some scholars see ethnically diverse nations with large mixed-religion populations as existing in a state of instability and danger, rooted in ancient hatreds, a thought process perhaps best typified by Samuel P. Huntington (1996), this approach finds little applicability to that used in this work. Some evidence shows that the probability ethnic groups coming into conflict increases with the number of previous conflicts fought (Cederman et al, 2010). Certainly, as enduring rivalries between nations can increase the likelihood of conflict, so too can enduring rivalries between ethnic coalitions (Senese and Vasquez, 2008). We know enduring rivalry and bitterly entrenched hatred destroys the ability to make credible commitments, yet, such feelings typically follow violence, rather than proceed it. Donald Horowitz's (1985) seminal work, Ethnic Groups in Conflict, can shed some light on these matters, providing nearly comprehensive overview of ethnic conflict and cooperation in the world. Horowitz (1985) captures some of the key problems facing post-colonial African nations that have deep divisions upon tribal lines, though we may argue that the majority of his examples exist in the absence of strong institutions
and poor economic conditions, and even ethnic cleavages with strong historical precedent do not often lead to conflict in their absence.

Despite the lack of significance of ethnolinguistic fractionalization itself in most quantitative analysis, certain circumstances rooted in fractionalization can create mechanisms that reduce the chance of peaceful negotiated settlement. Ethnic divisions exacerbate the free-rider dilemma and encourage rent-seeking behavior, and multiplicity of ethnic groups can create tensions over the distribution of public goods. Good institutions may mitigate these problems by facilitating negotiated settlements. Indeed, ethnicity only plays the largest role in the most extreme cases (Easterly, 2001). Though institutions clearly hold importance, we must examine the specific institutions that may have greater impact on the ability to make credible commitments, namely institutions that enforce agreements, and the method of political mobilization. Intraethnic mediating institutions can arise naturally without government intervention (Fearon and Laitin, 1996). However, the restructuring of social order during the colonial period may likely have disrupted these traditional methods of arbitration. When politicians seek support from ethnic and religious leaders, they move through the channels of preexisting relationships of dependence, something rooted in both post-colonial power-structures, and the amount of control already delegated to them, as local governments and political parties have weak grassroots connections to individuals (Koter, 2013). In this regard, politicians may not be able to retake power delegated to locals, due to the specific local knowledge and personal ties the traditional elites hold. Thus, a principal-agent problem manifests. Intermediaries are important for their ability to deliver votes, largely due to weak political parties, and in return there is both the potential for personal material gain, as well as public works projects for their area. Because of the personal interest of local notables, if a politician from a different group
offers them a better deal, they are likely to take it, again, because the relationship is dictated by self-interest, rather than cultural affinity (Koter, 2013). However, this hinges upon trust in the credibility of their commitment an executive can provide. This presents an enormous problem in non-iterated scenarios for challengers hoping to take control of government through elections, because they have no proof of their commitment to reward traditional elites defecting from the current regime.

If we assume each of these groups act to both ensure political survival and maximize profits maximization, then they have great incentive to misrepresent information and defect on agreements. Fearon and Laitin argue “ethnic groups cooperate to take advantage of each side's superior information about the behavior of individuals within the group, and this leads to the containment of interethnic violence (1996).” However, traditional elite's incentive to misrepresent information in its dealings with the executive often leads to reduced accuracy in signaling. Each group needs a certain level of trust in the credibility of commitments to bargain efficiently. In response to the perceived threat of extra-constitutional regime change, many leaders will attempt to expand their ethnic coalition through patronage (Arriola, 2009). Patronage and political appointments can constitute a form of signaling for the executive, used to ensure its commitments are credible. However, the efficacy of patronage to ensure political survival appears to have a diminishing return (Arriola, 2009). If the executive delegates too much authority to other groups, its share of social control diminishes to a level where it becomes ineffective and the executive loses its ability to make credible commitments through rule of law. After conflict, the executive may an even delegate more power to traditional leaders, and as it already demonstrated its inability to prevent violence, the population may turn to the strengthened traditional leaders for security. Furthermore, the economic elite will feel even more
alienated because it is not included in power-sharing agreements. Depoliticization of access to capital increases the likelihood multi-ethnic coalitions will form, and this is largely due to the ability of the less ethnic-minded bureaucratic class' ability to use its private capital as a mobilizing force (Arriola, 2013).

2.1 Credible Commitments and Inter-Ethnic Bargaining Hypotheses

Aside from enforcement or punishment for defection, trust is what makes a commitment credible. This trust can be based on observations of past behavior, or expected future utility. Thus, measures of trust give us a reasonable approximation for credibility of commitment. I use trust in the courts as a proxy for perception of rule of law, as well as trust in the credibility of the government's commitments.

**H1: Recent political violence in a country will reduce the level of trust respondents have in government courts.**

If the executive power cannot prevent political violence, or is the perpetrator of it, then it loses the trust of individuals. In cases where the executive cannot prevent violence, its demonstrated lack of capacity to broker or enforce intra-ethnic agreements gives tribal groups no assurance it will be able to do so in the future. When the government itself uses force, individuals will rely more on their local leadership, due to fear of the executive. This threatens the ability of the executive to legitimatize intra-ethnic commitments, but also calls in to question the reliability with which it will reward its supporters. Also, if the courts are seen as a neutral arbiter, enforced by the executive, failure to uphold its decisions reduces trust in the executive, and the court seems simply an extension of the executive's will.

**H2: Respondents in countries that have experienced recent political violence will express**
a higher level of trust in traditional or tribal leadership.

**H3:** Respondents in countries that have experienced recent political violence will have a higher likelihood of expressing rule by tribal or traditional leaders is the best sort of government.

Lacking trust in an executive, individuals will turn to their traditional leadership, who have both a deeper grassroots relationship, and the assurance shared ethnicity provides. This also would give us evidence that traditional leaders have amassed a greater degree of social control. In that case, they may have greater autonomy from the executive as principal, and may not follow its wish as the agent.

**H4:** The higher the education and wealth of respondents, the lower their levels of trust in both tribal leaders and the courts.

The economic elite will not trust either group if ethnic mobilization is the primary route to power-holding. Without strong, trustworthy institutions, the economic elite will lack trust in the executive because as it does not need them to mobilize supporters for political survival, so it has less intensive to keep any commitments it makes to them. As traditional leaders have lower abilities to make intra-ethnic credible commitments, their ability to engender trust in the educated elite flounders.

**H5:** The strength of democratic institutions will increase trust in the courts.

Lastly, strong democratic institutions would increase trust in those in power, as it allows for accountability and transparency. Democracy also necessitates greater levels of intra-ethnic cooperation for power-holding, and increases the reliance on political parties for mobilization, rather than traditional leadership. Furthermore, party-based mobilization allows the economic elite a greater role, and makes the capital they hold more importance. Democratic governments
also have a much greater degree of accountability and oversight as we as a constitutional
guarantee.

2.2 Data and Research Design

The first set of models use to test the hypotheses, presented in Tables 1.a.- 3.b, rely on
data collected by the Afro-Barometer project during its second round, between 2002-2003.
The data come from 16 Sub-Saharan African nations with between approximately 1200-2500
respondents in each country\(^2\). All of the models are tested with ordered logistical regression
analysis to estimate the effect of independent variables upon the dependent variable. Covering a
variety of topics and widely considered unbiased and representative, the Afro-barometer project
collected surveys in 20 African nations beginning in 1999 in four rounds. Due to logistical
constraints, most countries have no more than two surveys total and typically these were not
taken in consecutive years. The survey compiles an impressive array of information despite the
inherent difficulty in collecting data in Sub-Saharan Africa\(^3\).

\(^2\) The countries are as follows: Botswana, Ghana, Lesotho, Malawi, Mali, Namibia, Nigeria, South Africa, Tanzania,
Uganda, Zambia, Zimbabwe, Cape Verde, Kenya, Mozambique, and Senegal. However, the specific survey
questions used in the models were not asked in Cape Verde, so it does not appear in the analysis. The same applies to
Zambia in model 1 in Table 1 and Zimbabwe in models 2 and 3 in tables 2 and 3.

\(^3\) However, problematically, as researchers are only able to collect data from the more stable countries within the
region, the data may suffer from selection bias. Furthermore, some of the accuracy of the variables may come into
question, particularly age, as especially for the older respondents, little birth documentation may be available.
Furthermore, in most Sub-Saharan African nations a significant portion of the population is under 18 and therefore
unable to answer the survey.
Dependent Variables

Trust in Courts: The first model uses an ordinal Likert scale question, involving level of trust in the country's court system. Also, as some of the countries are ruled under personalist regimes, and therefore that question might reflect trust in the person of the executive and not in the office. Likewise, the legislature or cabinet may play a primarily ceremonial role, or have no real authority. Additionally, as many of the legislative seats or cabinet positions may reflect regional traditional powers, it may generate significant results without properly measuring the correct mechanism.

Trust in Traditional or Tribal Leaders: The second model again uses a Likert scale question that ranges from 1 to 6, coming from the Afro-barometer data, used to measure a respondent's trust in traditional or tribal leadership.

Belief that rule by chiefs or elders is the best sort of government: The third model, employs a Likert scale numbered 1-3 measuring belief that traditional or tribal leaders would be the preferred method of governance. It logically follows that those who deem localized traditional government as the best form would be more likely to support traditional elites if they clash with the executive.

Independent Variables

National ID: For the variable, National ID, the survey asked respondents this question in a binary fashion, zero being nation and one being identity group. This allows us to gage the

4 All of the survey questions used in Tables 1 through 3 are found in their entirety in Appendix a.

5 Likert scales measure levels of feelings toward a subject, in this case six levels ranging from strongly distrust to strongly trust.

6 The identity group is whatever the respondent claimed as an identity. In some cases this could be an ethnic or religious group, but the most common response was farmer. The exact language of the question is included in
strength of national identity as evidence for development of civil society.

**ELF:** To measure ethnolinguistic fractionalization, I use the ELF measure modified by James D. Fearon discussed in *Ethnic and Cultural Diversity by Country* (2003). The *Atlas Norodov Mira* forms the basis for the most commonly used measure of ethnolinguistic fractionalization (ELF in shorthand). Written by Soviet ethnographers in the 1960s, and altered substantially by subsequent scholars, the ELF score for a country is operationalized by generating a value ranging from 0-1 based on the likelihood a member of one ethnic group would not meet a co-ethnic if another person from that country were chosen at random (Fearon, 2003). Perhaps the largest problem in using the measure in the Sub-Saharan African context lies in the coding of Somalia, which the *Atlas* interprets as largely homogenous, but after the civil war the majority of scholars point to its deep clan divisions as a source of fractionalization.

**Democracy:** The control variable for democracy in the pooled cross sectional portions of the model comes from the Polity IV dataset. The dataset quantifies a country’s regime type in a 21 Appendix A.

Though Somalia is not included in the models in Tables 1 through, 3, the models in Table 4 include the country. Providing a somewhat similar critique, *Measuring Ethnic Fractionalization in Africa*, Daniel N. Posner discusses issues with the ELF measure's validity. He proposes that summarizing all ethnic diversity in a single statistic fundamentally does not generate usable results for economic models. ELF oversimplifies multi-faceted elements and therefore makes causation virtually impossible to establish (Posner, 2004). Based upon use of the same language, *Atlas* categorizes some distinct tribal groups together. For example, Posner points out the most troublesome example, the measure classifies the Hutus and Tutsis as a single group exposes a major discrepancy between the measure and important cleavages such analysis needs to identify. For his research, he applies a measure he calls Politically Relevant Ethnic Groups, measuring not all existing ethnic groups, but rather those politically active. Though the second formulation is something similar to my theoretical framework regarding the agent-traditional leaders and ethnic interest groups, I use an ELF measure due the availability of data.
point scale ranging from -10 through 10 with -10 through -6 being autocratic governments, -5 through +5 representing anocracies, or governments with both autocratic and democratic characteristics, and democracies, which range from 6 through 10 (Marshal and Jaggers, 2002).

Protest, Violence: As any sort of political unrest or violence would likely have a strong impact on the results. To this end, the models in Tables 1 through 3 will use a modified form of Arthur Banks' cross sectional dataset. As the data were collected between 2002-2003 it is impossible to judge exactly when an interview corresponded in time to any given event of political violence or unrest. Thus, the model uses Banks' data from 2001, to ensure the variables do not measure effects that have not yet occurred (Boehmer, 2007, 2010). I use Banks' domestic variables that count general strikes, guerrilla warfare, government crisis, riots, anti-government demonstrations, and revolutions. Factor analysis is employed to examine the covariance of the variables and aggregate those most similar amongst Banks' eight political unrest and violence count variables. As expected, the anti-government demonstrations and riots variables correlate exceedingly well, and less significantly, with the general strikes to form the Protest variable. Comparably, the guerrilla warfare and revolution components have high levels of correlation, but less so with the government crisis variable, comprising the Violence variable. Both variables were scaled from the factored, rotated Bank's variables using Bartlett's test of sphericity to ensure the factor models were appropriate (Boehmer, 2007, 2010).

Education: The model uses an ordinal measure of education coming from Afro-barometer, categorized as: no formal schooling, informal schooling, some primary schooling, primary school completed, some secondary school/ high school, secondary school completed/high school, post-secondary qualifications, not university, some university, college, university, college completed, post-graduate. In many ways, higher levels of education proxies the bureaucracy or
business class elite. Additionally, Education should be highly significant in all the models, as individuals at higher level of education are more likely to have higher levels of political sophistication. Though education may serve as a poor proxy for sophistication in American politics, large disparity in level of education throughout many Sub-Saharan African countries makes the measure a great deal more appropriate in this thesis (Luskin 1990). Aside from sophistication, I use this measure as a proxy for the economic elite in the country. I expect that this variable will have negative effect on trust in countries where executive delegate political mobilization to traditional leaders rather than political parties.

Age: Each Afro-barometer respondent gave their age (if it was known), and age gives us the closest proxy to the individual in relation to the change in the countries’ governments over time. Age is measured as a continuous variable (based on the age the respondent gave).

Income: If an individual is doing well economically, it follows they are less likely to be discontent with the government or the state of their nation. However, this may not be the case for those individuals belonging to the educated elite and excluded from power-sharing agreements, or be subject to rising expectations. Here, the variable may have mixed results. Unfortunately, the survey information does not convert the household income sums into a common currency to construct a continuous variable; rather, it uses an ordered variable breaking the grouping into ten deciles and no income. Though a continuous variable would be preferable, the decile method used to standardize income should produce the desired effect.

Urban: Whether the respondent lives in a rural or urban region also is an important control as some rural communities may be both homogenous and isolated, thus having lower levels of interaction with the national government and more with traditional leadership. Additionally, urban areas will have a higher concentration of the economic elite class. Urban respondents were
coded as zero and rural as one\textsuperscript{8}.

2.3 Models and Results

In all three models, the variables aggregated at a national level produce high levels of significance in the pooled model, but are dropped for perfect multicollinearity when individual nations are considered. Both the Violence and Protest variables, as may be expected, hold significance and have negative effect on Trust in the courts in Table 1, a finding that supports the first hypothesis. But perhaps more striking is that the Protest variables have a negative impact on Belief that rule by chiefs or elders is the best sort of government, in Table 2, though Violence has a positive influence. This bolsters the third hypothesis, demonstrating that dissatisfaction with the government alone does not cause people to prefer traditional leadership, and violence is necessary for the phenomenon. Also notable, Education performs the best at the nation level in all models, as highly significant in almost every country, a finding that seems to corroborate hypothesis 4. We can take this as evidence that in most countries the economic elite acts as its own distinct group more removed from ethnic power-structures. Additionally, the more politically sophisticated an individual, the less trust they may have in the government, partially due to greater levels of interaction with government institutions, but also because they are more likely to have access to information about scandals and other negative political news, as well as have access to foreign media. The Income variable performed less well than the Education

\textsuperscript{8} I ran the model with gender as an additional control, as it is often used in survey models. It was not significant in the model that appears in Table 1, it was positive in the model that appears in Table 2, and negative in Table 3. It also did not change the significance of other variables, or the directions of their coefficients. Due to the inconsistency of the control, and its lack of theoretical relevance, I omitted it from the final model.
variable being only weakly significant and positive in Table 1, and strongly significant and negative in Table 3. It makes sense that it would have a strong negative effect in Trust in traditional or tribal leaders, as again, we are using Income as a proxy for membership in the economic elite. As we might expect, the higher the level of a country's Democracy score has a strong positive effect on Trust in the courts, supporting hypotheses 5. Democracy has a negative effect on Belief that rule by chiefs or elders is the best sort of government in, Table 2, but has a positive effect on Trust in traditional or tribal leaders in Table 3. This indicates that democratic institutions help make traditional leaders’ commitments more credible.

In all three models, the independent variable National ID has the strongest effect in Nigeria. Worrying this may be driving the data, I ran all three models a second time omitting the data for Nigeria, and the significance levels in the models were unchanged. Table 1, examining Trust in courts, National ID, is significant at the 95% level, with National ID holding a positive effect at the cross-national level. In the nation level results, the National ID variable only held significance in Nigeria, Malawi, and Botswana. In Nigeria, this could be a result of the long-standing ethnic or religious cleavages between the Muslim North and Christian south. Similarly, in Malawi, this could be explained, in part, by the rivalry between the Chewa and Tumbukas tribes (Posner, 2004). Botswana does not seem to fit this case so neatly, but as respondents could identify primarily with their profession, this could be the case. The Trust in tradition or tribal leaders variable, in Table 3 has highly similar results, however, National ID has a strong positive effect, suggesting that individuals who identify primarily as their nationality have higher overall levels of trust in governing elites, potentially evidence of efforts to build civil society, or simply cases where the country has developed greater efficacy in credibility of commitments. Highly interestingly, in Table 2, National ID does not hold statistical significance at the pooled
level. Again the results hold most strongly significant for Nigeria, though they are significance at the 95% level in Ghana and Kenya. ELF has a strong negative on Trust in courts in Table 1. The negative effect of ELF could be due to the number of ethnic groups excluded from power-sharing agreements, based on sheer amount of ethnic diversity. This could also show the executive has delegated more judicial functions to traditional leaders than they would if fewer were present. In Table 1, examining the *Urban* variable, rural respondents have less Trust in the courts, and in Table 2 have a higher Belief that rule by chiefs or elders is the best sort of government and in Table 3, have greater Trust in traditional or tribal leaders. This is consistent with the theoretical expectations as in rural areas, as typically traditional leaders have more administrative and judicial powers delegated to them and the executive government has more control in urban areas. *Age* also has a negative effect on Trust in courts in Table 1, whereas it has a positive effect on both Belief that rule by chiefs or elders is the best sort of government and Trust in traditional or tribal leaders in Tables 2 and 3. This makes sense as capacities of governments have steadily increased since independence.

All the models perform well in goodness of model fit, with the exception of a low $R^2$, for all the models, and in some countries, low number of observations. Besides the generally low $R^2$ we find with models that concern themselves with conflict, we might expect and even lower explanation of the variance because the pooled model mixes units of analysis. Furthermore, though not of importance to this theoretical framework, the effectiveness and honesty of government certainly has the largest effect on trust in government. If a government is generally ineffective, corrupt, and inequitable, individuals of any demographic would not trust it. For Model Table 3, ideology or religious adherence would certainly come into play as well.
<table>
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<th>Senegal</th>
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| N               | 14229 | 963 | 757 | 914 | 1531 | 1944 | 1309 | 621 | 574 | - | 815 | 802 | 1653 | 924 | 911 | 511 |
| p-value         | 0.000 | 0.0000 | 0.0000 | 0.0451 | 0.0001 | 0.000 | 0.0000 | 0.0012 | 0.0000 | - | 0.0188 | 0.0000 | 0.2491 | 0.0002 | 0.1045 | 0.0373 |
| Log             | -1.804 | -1.299 | -0.771.2 | -1.160 | -1.800 | 2.197 | -1.431 | -0.756.9 | -0.709.1 | - | -1.016.49 | -1.013.49 | -2.080.75 | -1.168.79 | -1.143.80 | -6.439.3 |
| Likelihood      | Pseudo R² | 0.0240 | 0.0144 | 0.0271 | 0.0049 | 0.0072 | 0.0060 | 0.0167 | 0.0131 | 0.0224 | - | 0.0066 | 0.0164 | 0.001 | 0.010 | 0.0040 | 0.0091 |

Source: Afrobarometer Round 2, 2006

*** p< .01, two-tailed test
** p< .05, two-tailed test.
*p < .10, two tailed test
Table 2  Belief that Traditional or Tribal Rule is the Best Sort of Government, 2002-2003(Ordered Logit Analysis)

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| N               | 14229       | 1011    | 792     | 927      | 1563    | 1963   | 1326  | 618      | 550        | -      | 788       | 802    | 1668        | 896     | 933     | 515      |

| p-value         | 0.0000      | 0.0000  | 0.0000  | 0.045    | 0.000   | 0.000  | 0.000 | 0.0010   | 0.0000     | -      | 0.0000    | 0.0000 | 0.0000      | 0.0000  | 0.0000  |
| Log             | -18040      | -1541   | -1917   | -1206    | -2252   | -2964  | -1921 | -772.2   | -800       | -      | -972.49   | -2080.75| -2298.02    | -1341.24 | -1334.27| -731.58  |

| Pseudo R²       | 0.0240      | 0.0138  | 0.0249  | 0.0126   | 0.0108  | 0.0104| 0.0188| 0.0232   | 0.0142     | -      | 0.0204   | 0.0164 | 0.0080      | 0.0105  | 0.0163  | 0.0240  |

Source: Afrobarometer Round 2, 2006

*** p< .01, two-tailed test.
**p< .05, two-tailed test.
*p< .10, two tailed test.
## Table 3  Trust in Traditional or Tribal Leaders, 2002-2003 (Ordered Logit Analysis)

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</table>

Source: Afrobarometer Round 2, 2006

*** $p< .01$, two-tailed test.

**$p< .05$, two-tailed test.

*p $p< .10$, two-tailed test.
2.4 Trust and Credibility Analysis

These results may demonstrate that in the wake of conflict, Trust in the courts, and thus, their ability to make credible commitments, erodes. After political violence takes place, individuals rely more heavily upon their traditional leaders, those with whom they have the most direct connection and access, as well as the greatest cultural affinity. The reliance of the local populace upon traditional leaders increases the asymmetry in information between principal and agent. In this way, the traditional leaders gain a greater degree of social control at the expense of the executive. The lack of credibility in intra-tribal relations can cause more insular behavior, and suspicion towards outsiders. Either the genesis or renewal of ethnic cleavages, or attempts to broaden the power-sharing coalition, increases reliance on traditional leadership can also occur. This theoretical framework is supported because we can discount the null of the first three hypotheses. The more educated respondents in a country have lower levels of Trust in courts, and Trust in Traditional or Tribal leaders. This gives us evidence that the economic elite mistrust the traditional elite and the executive. Exclusion or underrepresentation in power-sharing agreements provides a strong candidate for a formative force in this opinion. The largest “tribe” in these countries, the middle class, may have the greatest reason to not find any commitments credible, an idea supported by hypothesis 4. Also as expected, the strength of a country's democratic institutions increases the levels of trust in the courts, but surprisingly, also traditional leaders, a somewhat counter intuitive result. However, higher levels of Democracy does reduce Belief that rule by chiefs or elders is the best sort of government. Still, with the evidence in this section we can discount the null of hypothesis 5. Though it would appear that the strength of an individual's identification with their country seems to improve overall trust in governing elites, whether traditional leaders or the executive. We can take this as evidence for efforts at nation-building or
investment in civil society, which can increase the credibility of commitments. It may also suggest regime stability, and therefore an executive who is not actively delegating more powers to local actors. The National ID variable in Table 2 does not have a significant relationship with Belief that rule by chiefs or elders is the best sort of government. This suggests the strength of an individual's national identity has negligible effect on desire to replace the government on cultural grounds. Based on this evidence, we can discount the null of all six hypotheses. Though this research alone only offers modest support for the proposition that conflict forges ethnic cleavages, and not the inverse, the results hold promise. Self-interested behavior reduces credibility between ethnic groups; the principal-agent problem lessens credibility between traditional elites and the executive; and exclusion from power-sharing estranges the economic elite. War is costly beyond coin or capital, though for negotiation to take place; those involved in bargaining must be able to trust the other, despite suspicions rooted in self-interested behavior.
Chapter 3: Delegation, Patronage, Horizontal Inequalities, and Strategic Territory

The third chapter begins by examining how delegation and patronage can create horizontal inequalities and create economically valuable or strategic territory, another of Fearon's (1995) rationalist explanations for war. Next the chapter describes a research agenda to further test this theory, and policy recommendations to alleviate the problems the thesis has discussed thus far. If delegation of political mobilization to traditional elite from the executive is key in the discussion of credibility of commitments, then how the support is paid provides the basis for our next mechanism. When the executive turns to the traditional elite for political mobilization, personal ties between the executive and the traditional elite are ensured through patronage. However, this does not simply enrich the traditional elite themselves, because as members of a permanent interest group they are concerned also with profit maximization for their ethnic or tribal group as a whole. Because ethnic groups generally inhabit certain territories, territories controlled are by ethnic groups needed to form a winning coalition will be disproportionately developed.

Most interstate conflict finds its roots in territorial dispute (Vasquez and Senese, 2008). Territory also constitutes the core issue of many civil conflicts, and in lieu of an absentee or weak executive, political violence over land or territorial control can transpire with greater frequency (Cederman et al, 2010). However, for political violence to escalate to the level of civil war, the territory in question must have some remunerative qualities that beget contention. As most developing nations bear heavy dependence on commodities, valuable and non-transferable goods, grounded in a geographic area, such as oil, these territories can become incredibly combative, particularly when viewed as the primary route to wealth and prosperity. Some have argued that oil and other high value goods provide rebel groups with the capital to finance
conflicts and create opportunity for conflict initiation (Humphreys, 2005, Collier and Hoffler, 2000, Ross, 2005). However, this can, instead, simply reflect a lack of state capacity relative to wealth derived by trade, and a feeble bureaucracy (Fearon, 2005). Some lootable resources, or those easily extracted without industrial processes, such as alluvial diamonds, have a greater effect on ethnic civil wars rather than other sorts (Lujala et al, 2005). A diverse economy helps ameliorate this problem. If lootable resources vastly out strip nonlootable, the government receives revenue from the resource directly, and not through taxes, and does not engage in state-building policies, a greater likelihood of civil conflict results (Snyder and Bhavnani, 2005).

Problematically, opportunity-based arguments do not address the inefficiency of \textit{ex post} costs. Though the resource laden territory may be indivisible, the revenues it generates are not, and we do not find a zero-sum outcome. However, when the government behaves in the way Snyder and Bhavani describe, it ostensibly transforms public goods to rivalrous goods. Expanded private ownership of capital also increases the likelihood multi-ethnic coalitions will form (Arriola, 2013).

In this regard, it is not the good itself that causes cleavages; rather the distribution of the capital gained from it, and this is where horizontal inequalities become relevant. Drawing from Stewart (2008), Cederman et al (2011) define horizontal inequalities:

“Political HIs entail blocked or limited access to central decision-making authority within the state. The economic dimension taps the distribution of wealth among households. Social HI measures primarily groups’ uneven social access, for example, in terms of education and societal status. Finally, the cultural aspect captures group-level inequalities with respect to cultural policies and symbols, including national holidays and religious rights (2011).”
Disaggregating ethnic groups into geographic regions of a country, their model finds ethnic
groups both over and below the mean GDP are disproportionately involved in civil war
(Cederman et al, 2011). Civil wars generally occur in specific locations do not typically envelop
an entire nation (Buhaug and Lujala, 2005). Also using geospatial data, Buhaug et al (2011) find
that local income levels hold greater importance than income aggregated at the national level.

Ethnically diverse populations have a higher tendency toward corruption and poor
economic growth (Easterly and Levine, 1997). Miguel and Gugerty (2004) examine the
relationship between ethnic diversity and collective action, and its effect on public goods
distribution. Basing their study in Western Kenya, they argue that ethnic land claims have
changed little since their 19th century formation, they find when the level of diversity in a region
is higher, its funding for public schools and access to public wells are lower (Miguel and Gugerty,
2004). Partially this can find roots in a lack of voluntary local funding, caused by the free-rider
dilemma, because there is substantially greater inter-ethnic cohesion than intra-ethnic cohesion
(Miguel and Gugerty, 2004). They also note that in cases where the national government steps in
to provide funding for public goods, the efforts can suffer from regional and ethnic favoritism
(Miguel and Gugerty, 2004). Research in Kenya shows areas important for the executive's
political support receive disproportionate road-building project funding (Chege and Barkan,
1989). Evidence suggests that not only does ethnic diversity reduce the provision of non-
excludable public goods, but also increases the pervasiveness of goods acquired through
patronage. The spatial nature of ethnic territory and public goods provision, Mwangi Kimenyi
(2006) notes, has a strong effect on asymmetric advantages different ethnic groups enjoy. If
community contributions are important to the provision of the public good, diversity exacerbates
the collective action problem (Jackson, 2013). Providing public goods equitably across
geographic regions in heterogeneous societies constitutes a collective action problem (Olson, 1965). However, diversity does not indelibly increase difficulties with collective action. Comparing similar regions of Kenya and Tanzania Edward Miguel (2004) finds state-building exercises and equitable provision of public goods between regions helps reduce collective action problems. The executive has incentive to spread public goods equitably across regions when it does not rely on traditional elite to mobilize support, and instead does so through a political party or other means. However, if it delegates political mobilization to traditional leaders, whose own political survival does not require them to provide the good ethnic groups outside their own region, the distribution becomes skewed. Hence, public goods will be concentrated in the regions controlled by traditional leaders who are tasked with political mobilization, and will be found lacking in those controlled by other ethnic groups. If patronage goods increase as non-excludable public goods decline, then measuring patronage's effect on civil war onset can give us some evidence for this mechanism.

3.1 Delegation, Patronage, Horizontal Inequalities, and Strategic Territory Hypotheses

*H6: Lower provision of non-excludable public goods and increased distribution of goods through patronage will increase the likelihood of civil war onset.*

Though inequitable treatment can most certainly foster resent between peoples, I do not argue this alone increases the likelihood of civil war. Rather, asymmetric distribution of public goods contributes to horizontal inequalities between ethnic groups. Uneven access to public education creates great disparities in levels of human capital and economic opportunity. Inequitable distribution of roads slows down commerce. If individuals must spend a significant portion of their day simply obtaining water, this absorbs huge amounts of labor and effort. A lack
of access to electricity can preclude entire regions from all manner of industry. Though internet usage has substantially increased in most African countries, and with it the ability to find more competitive markets for products, uneven access limits options for find better buyers for cash crops and other revenue sources.

\textit{H7: Major changes in the makeup of an executive's ethnic coalition will increase the likelihood of civil war.}

As ethnic groups led by traditional elite delegated with political tasks enjoy a greater provision of public services, not to mention personalist rewards, removal from the coalition would mean a decreased share, problematic for interest groups looking for profit maximization. The executive may attempt to assert its authority by removing an ethnic group from the coalition in response to the principal-agent problem. Furthermore, the executive will lack the traditional leader's specific local knowledge, and will administer provision of public goods less effectively, the same being true if different traditional leadership were given the task. If a number of traditional elites are no longer mobilizing regions for support, this may increase the risk that an executive loses reelection. In this instance, the executive may resort to extra-constitutional means to retain power.

\textit{H8: An interaction between the size of an executive's ethnic coalition, and a major change in its composition, increases the likelihood of civil war.}

Since stability achieved through patronage has a diminishing return, executives that have over-delegated powers will have even less capacity to supply patronage goods to ensure loyalty of traditional leadership. If the executive relies on traditional elite for mobilization, rather than a political party, changes in the tribal coalition should cause greater instability. If the executive is gaining support through patronage, than the removal of a minister from office signifies exclusion
of that minister’s ethnic group from the power sharing coalition. When not employing patronage and instead relies on a political party for mobilization, the removal of a minister may not indicate that his or her ethnic group is no longer a part of the power sharing coalition.

3.2 Data and Research Design

The data for this model originate from Fearon and Laitin (2003), Arthur Banks' Cross-National Time-Series Data Archive, and the Polity project.

Onset: The model uses a binary dependent variable recording the advent of civil war, coming from data first used in Fearon and Laitin's work regarding the subject, covering the years 1960-1999 (2003). They themselves extrapolate their measure of from an earlier variable created by Collier and Hoeffler, which define a civil war as an” internal conflict with 1000 or more battlefield deaths (1998).” The variable is coded zero for peace years and one for civil war onset.

Cabinet Size: Following the lead of Arriola (2009), I use the size of a country's cabinet as a proxy for the use of patronage in a particular regime as it presents us with “one of the few observable representations of the coalitions built by African leaders.” The data come from Arthur Banks Cross-National Data set and the variable is a simple continuous count of the number of cabinet ministers in a country9.

Cabinet Change Count: This variable quantifies the number of major changes in a country's cabinet over the course of a year, in the form of a count. Theoretically, the major change of

9Population size is a commonly used variable in the civil war literature, and could potentially affect the size of a cabinet. I ran the model with population size as a control and it neither changed the significance of other variables, nor the direction of the coefficients. As it is not particularly relevant to the theory, and did not perform well as a control, I omitted it in the models that appear in Table 4.
cabinet positions represents a visible shift in the make-up of the executive's coalition. This may measure a reaction to ethnic groups' demand for greater inclusion in the power-sharing process, and an attempt to revoke an ethnic group’s agency, a dangerous prospect for the executive. The number of cabinet changes in a year ranges from zero to five.

**Cabinet Change Dummy:** I collapse the cabinet change count into a binary variable. This serves a two-fold purpose. First, it allows us to ascertain whether a change takes place or not matters, or the number of changes. Additionally, this also makes it possible to create and measure both a continuous interaction and a dummy, which may perform better in the model.

**Cabinet x Cabinet 1:** I created this variable to test the proposed interaction effect by multiplying the cabinet size variable and the cabinet change dummy. Theoretically, making a change in the ethnic coalition should destabilize the country much more if the executive relies on local traditional leadership, rewarded through patronage, instead of its political party for mobilization.

**Cabinet x Cabinet 2:** The second cabinet interaction variable multiplies the cabinet size by the number of major cabinet changes, in order to ascertain whether the number of changes holds importance, or if a multiplicity of cabinet changes has no different effect than the aggregated dummy.

**ELF:** The following model uses the same variable discussed in the previous chapter.

**Democracy:** The control for democracy in the pooled cross-sectional portions of the model comes from the Polity IV dataset reviewed in the previous chapter.

**Democracy Squared:** I generate this variable by squaring a country's Polity score and centering the variable by subtracting the mean. The squared term of Polity is used to represent weak institutions, as countries with neither strongly democratic nor strongly authoritarian regimes reside in the middle of the scale. When a country has a strong authoritarian government with a
high capacity, for example Saudi Arabia, the threat of civil war is low because of the government’s ability to promptly put down any sort of civil war. When a country has a consolidated democracy, then it is unlikely the country will have a threat of civil war because of the widespread political inclusion democracies enjoy. It is countries in the middle of this scale, those with elections, some political participation, but rather oppressive governments that are most ripe for civil war (Hagre et al, 2001). Thus, to capture this relationship, the polity score of a country is squared to produce a curvilinear effect, measuring democracy not as a linear variable, but with a parabolic form.

**LogGDPl:** Gross Domestic Product is the most common proxy for a lack of government capacity. I obtain the variable from data provided by Charles Boehmer (2007, 2010). As the sample includes only Sub-Saharan African countries, the variable likely will not have a great effect, due to the similar economic development across the region. I use a logged GDP because the high GDP of South Africa may skew the results as an outlier. I also choose a one-year lagged variable to reduce the risk of reverse causality in case GDP is driven by domestic events, such as civil unrest.

**Peace Months:** The variable “Peace months” acts as a control to ensure the cabinet variables do not simply predict a reaction to preexisting political turmoil, rather than the cause of it. The peace months counts the number of months since a country has engaged in mass conflict. Aside from Peace Months providing us the ability to establish a causal direction for our patronage variables, it also helps control for when a new conflict is really continuation of a previous unresolved conflict.

**Oil:** As noted in the previous discussion on resources and civil war, whether or not a country produces petroleum give us an important theoretical control for that pool of work, coded as zero
for no oil, and one for high oil production. The variable originates from Fearon and Laitin’s (2003) dataset.

**Schools 1:** To measure the asymmetric allocation of public goods, I employ primary and secondary school enrollment *per capita* with data coming from Banks (2010) data-set. If there is a higher school enrollment *per capita* in a country, this could indicate that the government is providing higher levels of and equally distributed public education.

### 3.3 Model and Results

To appraise the relationship between models of civil war, I estimate the effects with logistical regression analysis using cross-sectional time series data including Sub-Saharan African countries\(^{10}\) from the year 1960 to 1999, using the country as the unit of analysis. Surprisingly, the Cabinet Size variable does not appear significant in any model. A proxy variable for patronage may not perform properly without geocoded data, as heterogeneous populations may share the same space, and the public goods do not become exclusionary without defined territorial boundaries receiving asymmetric public goods distribution. Cabinet Change Dummy and Cabinet Change Count, however, performed exceedingly well in Table 4 models 1 and 2. Though it does not relate as directly to the patronage-public goods discussion, Cabinet Change Dummy and Cabinet Change Count do have relevance with regards to credibility of commitments. Beyond personalist gain cabinet members themselves may accrue, the structures of the cabinet appointments also allows the executive to signal commitment to ethnic groups that have members belonging to that coalition. In each of the four models in Table 4, ELF has a

---

\(^{10}\) The categorization of whether a country is Sub-Saharan African or not follows the Correlates of War project dummy variable coding for the years 1960-1999. Because of this Sudan is not included in the sample.
significant and negative effect. This indicates increased diversity in a country lowers the likelihood that it will experience civil war.

Referring to Table four, as expected, we find that LogGDPl is insignificant in all models. This is consistent with the theoretical expectations, as this work treats state capacity as a base assumption, rather than an explanatory variable. It seems that variation between low capacity states does not affect civil war onset. Having said that, the models in Table 4 do not point to some sort of threshold at which low state capacity becomes analogous to anarchy. Neither the Democracy variable, nor Democracy squared are significant when using robust standard error in any of the models appearing in Table 4. Most likely, the under performance of the these variables, contrary to theoretical expectations, result from the relative lack of variation within the sample, due to the short time span considered and the largely undemocratic nature of many of the nations considered. Neither the Oil nor the School Enrolment variable are significant in any of the models in Table 4 again, this is likely because the spatial element of these mechanisms is not reflected in aggregated data. Furthermore, Peace Months does not appear significant in any model, despite its theoretic importance as a control. All four models in table suffer from a somewhat low N, however, this is most problematic for model 3. Still strong P-values and robust standard errors make up for this shortcoming. As is common in most models that predict conflict, the $R^2$ is low, meaning the model does predict a great deal of the variance.

Table 4 Logit estimates of Sub-Saharan African Civil War Onset, 1960-1999 (using data from
**Fearon and Laitin, 2003, Boehmer 2007, 2010), Robust Standard Error, Clustered by Country**

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| N                          | 1077      | 1083      | 649       | 1077      |
| p-value                    | 0.0000    | 0.0010    | 0.0004    | 0.0001    |
| Log Likelihood             | -75.5306  | -79.1669  | -33.8679  | -72.651   |
| Pseudo $R^2$               | 0.1357    | 0.0951    | 0.2861    | 0.1687    |

**Source**

***** See Graph 1

**** $p < .01$, two-tailed test.

*** $p < .05$, two-tailed test.

** $p < .10$, two tailed test

* $p < .10$, one tailed test

### 3.4 Delegation, Patronage, Horizontal Inequalities, and Strategic Territory Analysis
If an executive makes a major change in his or her cabinet, this can represent a significant alteration of the ethnic coalitions, carrying with it a major reshuffling of patronage goods. As infrastructure and other public goods take time to construct, neither cabinet change variable speaks to horizontal inequalities created by asymmetric access caused by patronage. However, they can represent retraction of promises for pork-barrel projects for their region, or more liquid patronage goods. The Cabinet Change Count variable (models 1 and 4) seems to have a more significant effect than the Cabinet Dummy (models 2 and 3). To establish significance with an interaction between two continuous variables, the normal tests of significance prove insufficient. Thus, we need to examine the graphed confidence intervals of the predicted probability in Figure 1 (Brambor et al, 2006). If the Diff_Lo and Diff_High, which are estimated confidence intervals, have the same sign direction, then the interaction is significant within that value range. Referring to Figure 1, we see the interaction begins to be significant at the 18th cabinet minister range. This is consistent with the theoretical expectations because cabinet sizes below this number would not typically denote a patronage system. We find that major cabinet changes in large cabinets increases the likelihood of civil war. Since the cabinet is a proxy for the ethnic coalition, and the cabinet size a proxy for patronage, we can interpret these results as evidence that making major changes to a country's ethnic-coalition contributes the most to the likelihood of civil war when the executive practices patronage. Around the 40 plus range, the confidence intervals expand widely, but the Diff_Lo and Diff_High still share the same direction. This occurs because very few countries have cabinets larger than 40. Since it is difficult to determine if the values are above zero from Figure 1 alone, the predicted value range is listed in Appendix B.
Figure 1 Interaction of Cabinet Changes and Size on the Probability of Civil War

Though, the Major Cabinet Change variable and horizontal inequalities produced by asymmetric access to public goods have an indirect relationship at best, it does relate to credibility of commitments. As goods distribution through patronage, public or personalist in nature, have little in the way of legal or contractual guarantee, such major changes in the ethnic coalitions reduce trust in the credibility of the executive's commitment, especially if they occur with great frequency. In Table 4, models 3 and 4, we see that the interaction between cabinet size and Major Cabinet Change modifies the effect of Cabinet Size. This would suggest that Major Cabinet Change matters most when the executive employs patronage. If an executive relies on its political party apparatus for mobilization, cabinet size does not necessarily represent patronage.
In this case, if it still represents an ethnic coalition, it is one not primarily held together by personal ties, but rather institutions, namely as political parties. Thus, a sizable change in the ethnic-coalitions matters much more in countries where the executive delegates political mobilization to ethnic groups. Also in all models included in Table 4, we see that higher levels of ethnolinguistic fractionalization actually decrease the chance of civil war. If a country has a high level of diversity, the number of ethnic groups required to make a majority coalition become greater in number. In this case, relying upon local traditional leaders for mobilization loses a great deal of efficiency, and mobilization through political parties becomes a more attractive option. Mobilization through political parties instead of patronage also may reduce favoritism for certain tribal groups over others. This assessment bares a great deal of similarity Migdal's (1988) discussion of political survival and the “triangle of appeasement.”

Also, the argument resembles selectorate theory put forward by Bueno de Mesquita et al (1999, 2005) and defended by Morrow et al (2008). However it differs in that as most Sub-Saharan African countries have, at least constitutionally, widespread suffrage, but differing levels of access to political enfranchisement. The winning coalitions are relatively small in certain cases, if we consider only politically relevant ethnic group. However, if we apply the principal-agent model, a third dimension is introduced. Namely, the Winning Coalition, in Bueno de Mesquita et al's (1999) terminology must provide public goods to its ethnic group in order to receive the private goods provided by the executive, because they have no formal ability to choose the leader. If the executive delegates distribution of public goods to an ethnic group led by agent-traditional leaders, than this changes the political survival calculus, as broad sections of the selectorate, that need to be included for the executive's political survival maybe excluded by the agent's self-interested choices, from public good distribution. This may disrupt Bueno de
Mesquita et al's (1999) political balance. Furthermore, the selectorate as a whole, an asymmetric distribution of them based on the political importance of their leaders and the size of their tribe, even in cases where leaders rely on personal loyalty, both public and private goods are provided. Judging by this evidence, we cannot discount hypotheses 7 or 8, however, we cannot discount the null of hypothesis 6 without further evidence. Nevertheless, this evidence does suggest not only does the politician risk their office as Koter (2013) discusses when employing patronage and mobilizing through traditional agents, but they may also risk war.

3.5 Conclusion

Close examination of trust between the economic elite, traditional elite, and executive can give us insight into the ability to of these groups to make credible commitments between and amongst each other. Analysis of the cabinet size and change, too, give us evidence for the role of credible commitments when the executive relies on local tribal leadership for political mobilization rather than political parties. Though this work displays some fairly convincing evidence for the latter mechanism, the indivisibility of territory made valuable by asymmetric public goods distribution finds much less support. Though the theory certainly merits further consideration, the models used in this work do not properly capture this mechanism and its relationship to civil war onset. To truly test this hypothesis, as well as those posited regarding valuable natural resources, new data are necessary. Geocoding data that document the density of public goods like roads, electrical grids, medical access, and access to public education regionally within a country, and comparing these spatial factors to ethnic territories, requires a considerable, but necessary, research endeavor. Even without these data, the case for rationalist explanations for civil war remains far more convincing than those that cite indelible cultural
incompatibility and irrational malice. Judging from the evidence presented in this thesis, one thing becomes clear, mobilizing political support through personalist ties and delegating the task to the tribal elite is a risker proposition than mobilizing political support through national institutions, particularly political parties. Thus, to increase the likelihood of regime stability, leaders could benefit from developing a grassroots party apparatus to rally political support independent of tribal ties. Though this proposition would experience many obstacles to implementation, it is certainly appears feasible. For example, at independence Tanzania dismantled colonial and tribal laws, and gave authority to village councils, who were members of their first President, Julius Nyerere's political party *Chama Cha Mapiduzi*\(^\text{11}\) (Miguel, 2004). Equitable regional distribution of public goods funding has been a center piece of Tanzanian policy since the 60's though many of the party's policies have changed substantially, would be leaders there in general rely primarily on political parties for mobilization. This is in contrast to Kenya, for example, where the leader's tribal power base has historically been favored, and the political party itself held relatively little importance (Miguel, 2004). Thus, strengthening political institutions, in particular political parties and an impartial judiciary can help facilitate the negotiation process and ensure commitments are kept credible, and horizontal inequalities between different ethnic territories do not develop. In contributing to the success of peaceful negotiation for dispute settlement, credibility of commitments between bargaining groups in society, and its role in allowing for negotiated settlement between traditional leaders, the executive, and the economic elite, as well as intra-tribal horizontal inequalities caused by asymmetric distribution of public goods may well mark the distinction between the Kigali of today, and the Kigali of a decade past.

\(^{11}\)Party of the Revolution, author's translation.
Appendix A.

Note: All binary variables were recoded 0-1. All cases where the respondent replied “don't know,” refused to answer, or the data were missing, the response was recoded “.” Each question is also given the name as used in the Tables 1.a.-3.b.

Variable name: Trust in Courts

**VARIABLE LABEL: Trust courts of law**

**QUESTION NUMBER: Q43J**

Question: How much do you trust each of the following, or haven’t you heard enough about them to say: Courts of Law?

Values: 0-3, 9, 98, -1

Value Labels: 0=Not at all, 1=A little bit, 2=A lot, 3=A very great deal, 9=Don’t Know/Haven’t Heard Enough, 98=Refused to Answer, -1=Missing Data

Source: Zambia 96

**Variable name: Trust in Traditional or Tribal Leaders**

Question Number: Q43K

Question: How much do you trust each of the following, or haven’t you heard enough about them to say: Traditional Leaders/Chiefs/Elders?

Variable label: Trust traditional leaders

Values: 0-3, 9, 98, -1

Value Labels: 0=Not at all, 1=A little bit, 2=A lot, 3=A very great deal, 9=Don’t Know/Haven’t Heard Enough, 98=Refused to Answer,

Variable name: Belief that rule by chiefs or elders is the best sort of government
Question Number: Q35B

Question: There are many ways to govern a country. Would you disapprove or approve of the following alternatives? All decisions are made by a council of chiefs or elders.

**Variable Label: Reject Rule by Chiefs or Elders**

Values: 1-5, 9, 98, -1 Value Labels: 1=Strongly Disapprove, 2=Disapprove, 3=Neither Approve Nor Disapprove, 4=Approve, 5=Strongly Approve, 9=Don’t Know, 98=Refused to Answer, -1=Missing Data

Source: NDB

Note: Interviewer probed for strength of opinion.

**Variable Name: Urban**

Question Number: urbrur

Question: PSU/EA

Variable Label: Urban or Rural Primary Sampling Unit

Values: 1-2

Value Labels: 1=Urban, 2=Rural

Source: SAB

Note: Answered by interviewer

Value Labels: 1=Strongly Disapprove, 2=Disapprove, 3=Neither Approve Nor Disapprove, 4=Approve, 5=Strongly Approve, 9=Don’t Know, 98=Refused to Answer, -1=Missing Data

Source: NDB

**Variable Name: National ID**

Question Number: Q57

Question: Let us suppose that you had to choose between being a [national identity] and being a
[respondent’s identity group]. Which of these two groups do you feel most strongly
attached to?

**Variable label: Group or national identity**

Values: 0-1, 7, 9, 98, -1

Value Labels: 0=National identity, 1=Group identity, 7=Not Applicable, 9=Don’t Know,
98=Refused to Answer,
-1=Missing Data

Source: SAB

Note: Interviewer probed for strength of opinion. If respondent had not identified a group on
question 54, this question was marked as “Not Applicable.”

Note: The question to ascertain group identity does not appear in the model but is needed to
understand Q57, it is as follows:

**Question Number: Q54**

Question: Let’s go back to talking about you. We have spoken to many [countrymen] and they
have all described themselves in different ways. Some people describe themselves in terms of
their language, ethnic group, race, religion, or gender and others describe themselves in
economic terms such as working class, middle class, or a farmer. Besides being [national
identity], which specific group do you feel you belong to first and foremost?

**Variable label: Identity group**

Values: 0-8, 10, 12-16, 50-51, 60, 61, 995, 998-999

Value Labels: 0=Can't explain, 1=Language/tribe/ethnic group, 2=Race, 3=Region, 4=Religion,
5=Occupation, 6=Class, 7=Gender, 8=Individual/personal, 10=Won't differentiate/National
identity, 12=Traditional leader, 13=Political party identity, 14=Age-related, 15=African/West
African/Pan African, 16=Island, 50=Portuguese, 51=American, 60=Family/relationship-based (e.g., wife, parent, widow, etc.), 61=Marginalized group (e.g., disabled, etc.), 995=Other, 998=Refused to Answer, 999=Don't Know, -1=Missing data

Source: SAB

Note: Interviewer entered respondent’

**Variable Name: Education**

**Question Number: Q84**

Question: What is the highest level of education you have completed?

**Variable Label: Education of Respondent**

Values: 0-9, 98-99, -1

Value Labels: 0=No formal schooling, 1=Informal schooling, 2=Some primary schooling, 3=Primary school completed, 4=Some secondary school/ High school, 5=Secondary school completed/High school, 6=Post-secondary qualifications, not university, 7=Some university, college, 8=University, college completed, 9=Post-graduate, 98=Refused to Answer, 99=Don’t Know, -1=Missing Data

Source: SAB

Note : Do not read options

**Variable Name: Income**

**Variable Label: Household Income**

Values: 0-10, 98-99, -1

Value Labels: -1=Missing, 0=None, 1=First decile, 2=Second decile, 3=Third decile, 4=Fourth decile, 5=Fifth decile, 6=Sixth decile, 7=Seventh decile, 8= Eighth decile, 9=Ninth decile, 10=Tenth decile, 98=Refused, 99=Don’t know
Appendix B.

The following table details the confidence intervals of the predicted probabilities generated in the Cabinet x Cabinet 2 variable as used in Table 4 Model 4. The shaded portion highlights the threshold at which the variable becomes significant, which can be see when both the Diff_lo and Diff_hi both share the same direction.

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Chege, Michael, and D. Barkan Joel. 1989."Decentralising the State: District Focus and the


Vita

J. Anthony Jastrzembski graduated with a Bachelors of Arts with Distinction in History and minors in Visual Art and English from St. John’s University in Collegeville, MN in 2009. He subsequently went on to join the St. John’s Benedictine Volunteer Corps. in Hanga Abbey, Tanzania, where was a staff member at St. Maurius Hanga Seminary, and taught English and Computers Skills, as well as assisting with two HIV/AIDS projects, one of which was cosponsored with the Peace Corps. and PEPFAR. Upon returning to the United States, Anthony worked on electoral and environmental political campaigns before enrolling at the University of Texas at El Paso in 2011. He was awarded the Pi Sigma Alpha award for best paper submission at UTEP chapter’s yearly conference in 2013. He graduated with a Master of Arts in political science in 2013.