

UNIVERSITY OF MASSACHUSETTS BOSTON
MCCORMACK GRADUATE SCHOOL OF POLICY AND GLOBAL STUDIES
DEPARTMENT OF CONFLICT RESOLUTION, HUMAN SECURITY, AND GLOBAL
GOVERNANCE

An Ethnic Security Dilemma in Africa?

Exploring the Role of Ethnicity in Conflict in
sub-Saharan Africa

Cassidy M. Evans

Advisor: Professor Darren Kew

Outside Evaluator: Professor Ebere Onwudiwe

Date Approved: May 17, 2011

Abstract

Ethnic divisions play an important role in conflict within Africa. The importance of ethnic identity within societies is that it can lead to a basic breakdown between competing groups resulting in years of conflict and strife since independence for many African states. This competition results in a conflict spiral, or a security dilemma, between warring groups. Viewing the classic realist notion of a security dilemma through the ethnic paradigm would present structure for certain options to manage the conflict within African states. This paper seeks to analyze the role of ethnic fractionalization, looking at both ethnolinguistic fractionalization and politically relevant ethnic groups' fractionalization, in relation to five measures of conflict: the numbers of intrastate wars and how many years of wars, the number of coups, the rating of each state on the failed state index, the level of freedom within each country, and the rating of each state on the global peace index. My conclusions suggest that ethnicity does not have a large enough impact on conflict within Africa to base any conclusions as to the validity of the idea of an ethnic security dilemma nor to serve as the route in which conflict resolution or management should be undertaken. It does, however, support the idea of a security dilemma in which ethnicity has a role. Future research should be undertaken looking at what the other factors may be in creating the security dilemmas within sub-Saharan states.

Keywords: ethnicity, conflict, security dilemma, Africa, fractionalization

Introduction

Africa is both the most conflicted continent in the world and the most ethnically diverse, and it is worth exploring if there is a connection between those two facts. The impact of colonization in Africa has left a continent in conflict. Since freedom from the colonial powers was granted in the mid-20th century, many of the newly formed countries faced the problem of creating a nation-state out of many nations - of bringing together groups that for centuries had been separate polities and were systemically kept apart to meet the needs of the colonial powers. A power vacuum was created when the colonial powers left, and new governments and institutions had to be formed. However, political mobilization generally took on the form that was used during the colonial period for control – that of ethnic group identification. The pervasive fear of domination by competing ethnic groups as the new states formed and power was newly distributed, helped to develop a Realist security dilemma within African states between ethnic groups, as no one wanted to be left out or get less than they felt their group deserved (Kew 2005).

This idea of a relative power competition compared to other groups is one that is entrenched in the realist political philosophy. Morgenthau (1978) dictates six principles of political realism, two of which specifically speak to the reality that the interests of states are defined in terms of power (Morgenthau, 1978, p. 5). More importantly, he points out the universality of this concept in that the politics of one state is just as quantifiable as another state's politics when it is boiled down to this one interest of power (Morgenthau, 1978, p. 9). The relationship between states, as defined in terms of power, is what leads to the idea of a “security dilemma” or a “conflict spiral” as was first defined by John H. Herz in the first half of the 20th

century (Herz, 1950). Kew (2005) argues that ethnic identity may create a security dilemma within weak or transitional states, which can help to explain the persistence of ethnic conflicts.

The significance of framing these conflicts in Africa as an “ethnic security dilemma” is that it provides two possible solutions to the dilemma: the balance of power theory or the hegemonic stability theory. However, the first step in analyzing whether or not we can say there is a presence of an “ethnic security dilemma” is to analyze the role ethnicity plays, if any, in conflict in Africa.

Ethnicity in African Politics

African States: Instability and Conflict

Africa is a very troubled continent. It has been slow to develop economically and in terms of political structures, and it is best with constant instability and conflict. Africa is known for some of the worst indicators of social well-being in the world: low life expectancy, low rate of schooling, poor policies, political instability, underdeveloped financial systems, insufficient infrastructure, and high-rates of criminal activity – to name just a few. Sklar (1983) associates these issues with the idea of “developmental dictatorship” and Joseph et al. (2008) uses the term “Frontier Africa” in depicting the image of lawless, material deprived masses who are at the mercy of politicians who use the fiction of democratic elections for nothing “more than just a set of rules for managing power struggles among elites” (Joseph et al., 2008, p. 96). Horowitz (1985) points toward the decolonization process and the spread of international ideologies, like equality, that “spurred ethnic groups everywhere to compare their standing in society against that of groups in close proximity” leading to competition and conflict (Horowitz, 1985, p. 5). However, the history of Africa is not unlike that of Latin America; both were subjugated to colonial powers, however, where Africa is today is far different from where most Latin

American countries find themselves. The lack of development and all the other tragedies faced by African countries cannot be looked at as just being the problem in itself, but rather as symptoms of a much larger issue affecting countries within the continent of Africa. A large amount of scholarly literature attributes these problems directly to the problem of ethnic divisions within countries (Easterly & Levine 1997; Kew 2005; Fearon 2003; Posner 2004).

Ethnicity: Identity and Conflict

Understanding the role ethnicity plays in keeping Africa in conflict, means exploring the concept of ethnicity and the important role it plays in conflict. Barth (1969) first views ethnicity using the lens of anthropology, suggesting that ethnicity:

1. is largely biologically self-perpetuating;
2. shares fundamental cultural values, realized in overt unity in cultural forms;
3. makes up a field of communication and interaction;
4. has a membership which identifies itself, and is identified by others, as constituting a category distinguishable from other categories of the same order (p. 10-11).

However, he takes issue with the importance given to these four cultural aspects and instead suggests that what an ethnic group is can be seen by “ethnic boundary that defines the group, not the cultural stuff that it encloses” (Barth, 1969, p. 15). These ethnic boundaries are what gives some membership to the ethnic group and keeps others out. Additionally, Barth argues that the ethnic identity is superordinate to other forms of social identity since with it comes a certain understanding and expectation of what roles one can play in society and what partnerships can be formed - either within the ethnic group or with individuals in other ethnic groups (Barth, 1969, p. 17). Furthermore, there is interdependence amongst ethnic groups in giving value and understanding to one’s own ethnic group (Barth, 1969, p. 19). As in, being able to make

comparisons between groups is just as important as an understanding a group's own perceived individual traits.

Building off of Barth's basic outline of ethnicity, Nagel (1994) seeks to better understand the role of ethnicity and culture. First, she identifies ethnicity: "...ethnicity is best understood as a dynamic, constantly evolving property of both individual identity and group organization" (Nagel, 1994, p. 152). She gives a discussion on various ways of viewing ethnicity and its evolution as an identity. In the constructivist view "the origin, content, and form of ethnicity reflect the creative choices of individuals and groups as they define themselves and others in ethnic ways" and it is derived "out of the material of language, religion, culture, appearance, ancestry, or regionality" (Nagel, 1994, p. 152-153). This does not negate the historical context in which ethnicity is derived, since, in fact, ethnicity is "constantly undergoing redefinition and reconstruction" (Nagel, 1994, p. 153). Understanding how ethnicity is perceived is relevant to understanding why it is an important part of a person's or a group's social identity and the effect that has in leading to conflict.

Tajfel (1974) makes the point that human beings, in order to make sense out of their environment and to simplify it, put things in categories that are meaningful to them, including groupings of people. From this categorization, a "social identity" is created which is defined as "part of an individual's self-concept which derives from his knowledge of his membership of a social group (or groups) together with the emotional significance attached to that membership" (Tajfel, 1974, p. 69). Additionally, an individual will only seek to change or move groups if they feel that the other group is in some way "superior" or "better" to the one they are in, thus giving us the understanding that there are normative values being assigned to group membership, and that it is best to be in the perceived better group (Tajfel, 1974, p. 72). How this value is assigned

is important and one way of doing so is through not just knowing who you *are*, but also being able to identify who you *are not* (Tajfel, 1974, p. 71). Being able to make this distinction is important in conflict situations since these identities reinforce one another and the conflict itself leading to a conflict spiral.

Kelman (1999), using the example of the Palestinian-Israeli conflict, describes a “negative interdependence identity” theory, in which one re-enforces one’s own identity by discounting the identity of other:

(t)he perception that it is a zero-sum conflict, not only with respect to territory, but, most importantly, with respect to national identity and national existence. Each perceives the very existence of the other – the other’s status as a nation - to be a threat to its own existence. (p. 587)

This zero-sum approach creates many barriers to conflict resolution since, the “[a]ssertion of the group’s own identity requires the negation of the other group’s identity; each group’s success in identity building depends on the other’s failures at that task” (Kelman, 1999, p. 589). This negative interdependence contributes greatly to the escalation of a conflict, since it promotes the conflict to a higher status – it is no longer about group A v. group B, but rather the very essence of the conflict is entrenched into a moral fight between good (you) v. evil (other). Further to the point, any interaction with “Other” is always viewed in a negative light, and even if a peace offering is given, it will more likely than not be dismissed due to reactive devaluation. This theory, when viewed through an ethnic lens, indicates that when a group’s social identity is based on ethnicity - which in part is being able to define who you are but also who you are not – there will be a negative interdependence between ethnic groups since a group cannot be the best if they are alone, only if there is some other group to better than. This negative interdependence

does little to promote the possibility of reconciliation, and in fact increases the stakes as well as the likelihood of continued negative interactions which are only reciprocated, leading to a conflict spiral.

Other scholars hypothesize that economic dilemmas are a symptom of ethnically diverse societies. Easterly and Levine (1997) sought to answer the question of why there were differences in economic growth between countries in Africa. The data they collected agreed with the hypothesis that “ethnic diversity affects many public policies associated with economic growth” (Easterly & Levine, 1997, p. 1206-1207). Aside from their own research, they rely on other works that highlight that “ethnically polarized societies are more likely to select socially suboptimal policies under many circumstances” with the purpose specifically being to hurt the other group (Easterly & Levine, 1997, p. 1214). This type of policy making is further heightened by the fact that these countries are “empirically less likely to have the kind of political institutions that create effective checks and balances, i.e., democratic institutions and rule of law” (Easterly & Levine, 1997, p. 1215).

Their measure of “ethnic diversity” was based on “measures [of] the probability that two randomly selected persons from a given country will not belong to the same ethnolinguistic group.” Within the field, this is known as “ethno-linguistic fractionalization” (ELF) and is based on data collected by the Soviets in the 1960s, who counted each ethno-linguistic group in each country. Their findings were as such (with the 15 least ethnically diverse to provide as a counterexample (Easterly & Levine, 1997, p. 1220) :

An Ethnic Security Dilemma in Africa?

Cassidy M. Evans

	15 Most Ethnically Diverse Countries	%	15 Least Ethnically Diverse Countries	%
1	Tanzania	93	Haiti	1
2	Uganda	90	Japan	1
3	Zaire (Democratic Republic of Congo)	90	Portugal	1
4	Cameroon	89	Hong Kong	2
5	India	88	Yemen	2
6	South Africa	87	Germany	3
7	Nigeria	86	Burundi	4
8	Ivory Coast	83	Dominican Republic	4
9	Central African Republic (CAR)	83	Egypt	4
10	Kenya	83	Ireland	4
11	Liberia	83	Italy	4
12	Zambia	82	Norway	4
13	Angola	78	Iceland	5
14	Mali	78	Jamaica	5
15	Sierra Leone	77	Jordan	5

When taking the global data of ethnic diversity of each country, the research showed that the level of ethnic diversity is highly relevant to rate of negative economic growth in a country even when controlling for things like initial income, financial depth, the fiscal surplus, and the black market exchange rate premium. Additionally, their research found that if a country like Nigeria had a diversity percentage of 42% instead of the actual 87%, then the rate of growth “would have been almost double its actual value of 0.7 percent per annum” between 1960-1990 (Easterly & Levine, 1997, p. 1224).

Interestingly enough, their work found that ethnic diversity does not in fact manifest political instability when looked at just in the sub-sample of African countries, but also that “Africa does *not* have significantly above average political instability” suggesting to the authors that “ethnic conflict[s] coexist[s] with governments that for long periods successfully suppress overt political opposition[s]” (Easterly & Levine, 1997, p. 1230-1231). Regardless though, the “data are consistent with the view that ethnic diversity tends to slow growth by making it more

difficult to agree on the provision of public goods and policies” (Easterly & Levine, 1997, p. 1231). They contextualize this claim by comparing Africa to East Asia and ultimately coming to the conclusion that “ethnic diversity differences are important for explaining Africa's growth tragedy versus Asia's miracle” (Easterly & Levine, 1997, p. 1237).

This contradiction between their data and their conclusions have flummoxed those in the field for years, but at the same time, their work led to ethnic fractionalization to be taken into account as an important measure for economic growth in Africa (Fearon 2003; Alesina et al 2003). Posner (2004) resolves this issue by creating a new method in which ethnic fractionalization within countries are calculated. He created a new measure since he considered there to be three flaws with the ethno-linguistic measure that severely lessened the accuracy and use fullness of any ethnic data. The three flaws are pointed out by Posner (2004) are:

First, the underlying ethnographic data from which the ELF measure is constructed are suspect. Second, summarizing the ethnic landscape of a country with a single statistic, as all ethnic fractionalization indices (including ELF) do, obscures features of ethnic diversity that may be highly relevant to the relationship between ethnicity and economic growth. Third, and most important, there is a critical mismatch in most studies between the causal mechanism that is claimed to link ethnic diversity with slow growth and the measure of diversity that is used to test that mechanism. (p. 850)

Posner's main issue is the data collected is not providing an accurate picture of the political reality of ethnic diversity in each country. To ameliorate this, Posner calculates ethnic fractionalization based on “Politically Relevant Ethnic Groups”, known as the “PREG” rating. A

snapshot of the difference between his ratings and that of Easterly-Levine is provided below (Posner, 2004, p. 857):

10 Least Fractionalized Countries				10 Most Fractionalized Countries			
PREG		ELF		PREG		ELF	
Botswana	0.0	Burundi	.04	Zaire (DRC)	.80	Tanzania	.93
Burkina Faso	0.0	Madagascar	.06	Cameroon	.71	Uganda	.90
Lesotho	0.0	Somalia	.08	Zambia	.71	Zaire (DRC)	.90
Madagascar	0.0	Rwanda	.14	Chad	.66	Cameroon	.89
Seychelles	0.0	Lesotho	.22	Nigeria	.66	South Africa	.88
Somalia	0.0	Mauritania	.33	Angola	.65	Nigeria	.87
Swaziland	0.0	Botswana	.51	Uganda	.63	Cote d'Ivoire	.86
Guinea-Bissau	.05	Zimbabwe	.54	Liberia	.62	Chad	.83
Mali	.13	Mauritius	.58	Mauritius	.60	Kenya	.83
Senegal	.14	Benin	.62	Tanzania	.59	Liberia	.83

Furthermore, when Posner replicates the economic analysis of ethnic diversity relative to economic growth, he finds a negative relationship between the two – something not done by others in the field although it was always assumed to be true (Posner, 2004, p. 859). His work is important, although limited as he only looked at 42 countries in Africa, because it cuts through irrelevant data and focuses in on who the politically significant ethnic groups who are competing within each country.

The combination of these two works makes a clear and convincing claim that more ethnically diverse countries, particularly those found in Africa, have suffered from long-term negative growth and that those who are afforded homogeneity have experienced more positive economic growth. Development, or rather the lack of development, and conflict have always shared a symbiotic relationship, with the least developed nations in our world also suffering the most from conflict. The data seems to suggest that having a more ethnically diverse country leads to poorer macroeconomic policies and thus poor development (Easterly & Levine 1997;

Fearon 2003; Posner 2004). The tie between the negative economic growth and how ethnically diverse a country is cannot be underscored enough in its importance to understanding why Africa is a continent in conflict, thus the role of ethnicity must be better understood.

Nagel and Olzak (1982) seek to address this phenomenon of poor economic development in ethnically diverse countries by studying ethnic mobilization. They define ethnic mobilization as “the process by which a group organizes along ethnic lines in pursuit of collective political ends” and they point to the economic relations leading to the ethnic mobilization rather than the ethnic mobilization causing the poor economic conditions (Nagel & Olzak, 1982, p. 127). They use the example of pre-independence Nigeria, where, in their opinion, there was solidarity amongst the three main ethnic groups – the Hausa, Ibo, and Yoruba – and go on to note:

Nigerian ethnic conflict was not the offspring of traditional antagonisms. Rather, the divisions in Nigerian social and political life were newly created, born of the economic and political competition that accompanied the transformation of Nigeria as a modern state. (p. 128)

It is not that the Hausa, Yoruba, and Ibo have historically always fought, but rather with independence, in an effort to consolidate power that these ethnic differences began to matter and manifest in the form of ethnic mobilization and conflict. Less specifically, this occurs when “(e)thnic identification is created or maintained as a basis for collective action when there are clear competitive advantages attached to an ethnic (as opposed to class, occupation, or some other) identity” (Nagel & Olzak, 1982, p. 130). Nagel and Olzak point to five factors that lead to ethnic mobilization, while cautioning that the list is not exhaustive: 1) urbanization; 2) the increased scales of organization; 3) the expansion of the industry and service sectors of the economy (over the agricultural sector); (4) the

expansion of the political sector; and 5) the establishment of supranational organizations (Nagel & Olzak, 1982, p. 131). All five of these factors have been prevalent since the 1960s in the newly independent countries of Africa.

Economist and sociologists use the term “competition” when viewing this issue, as is the vocabulary of their individual academic paradigms, however, what they are really speaking of is this idea of an “ethnic security dilemma.” Their observations need to be translated to the vocabulary and understanding of the field of conflict, or as Morgenthau put it, understanding the role of power puts “politics as an autonomous sphere of action and understanding apart from other spheres, such as economics (understood in terms of interest defined as wealth), ethics, aesthetics, or religion” (Morgenthau, 1978, p 7).

Realism: Power, Security Dilemmas, and Conflict Spirals

This struggle for power relative to other groups is most commonly understood when looking at the history of the development of modern international system which was derived from the development of the modern state (Kissinger, 1994). With the collapse of the Holy Roman Empire, the European landscape transformed from one large united entity into a myriad of states of roughly equal strength and power, and “(w)hen a group of states so constituted are obliged to deal with one another, there are only two possible outcomes: either one state becomes so strong that it dominates the others and creates an empire, or no state is ever quite powerful enough to achieve that goal” with the latter situation developing into “the operation of a balance of power” between the states (Kissinger, 1994, p. 20).

In the 1600s, Cardinal Richelieu of France defined the modern approach to foreign affairs as focusing “on the nation-state and motivated by national interest as its ultimate purpose”

(Kissinger, 1994, p. 17). This concept, known as *raison d'état* – or the reason of the state – dictates that the “well-being of the state justified whatever means were employed to further it” (Kissinger, 1994, p. 58). Basically, a state needs to do what a state needs to do to survive. This speaks directly to the issue of power of states and between states. In fact, “the success of a policy of *raison d'état* depends above all on the ability to assess power relationships” (Kissinger, 1994, p. 63). Few in history have understood that better than Otto von Bismarck of Prussia who redefined this concept into the one known as *realpolitik* – “the notion that relations among states are determined by raw power and that the mighty will prevail” (Kissinger, 1994, p. 104). This struggle between states in terms of power results in a security dilemma.

Herz (1950), a well-known classic realist, was the first to articulate the security dilemma, although the concept was not foreign to the realist paradigm that is often used to view international relations. Herz defines political realism in that it “...frankly recognizes the phenomena which are connected with the urge for security and the competition for power, and takes their consequences into consideration” due to the anarchic world we live in (Herz, 1950, p. 158). He juxtaposes this to that of the Idealist paradigm in which “usually starts from a more "rationalistic" assumption, namely, that a harmony exists, or may eventually be realized, between the individual concern and the general good, between interests, rights, and duties of men and groups in society; further, that power is something easily to be channeled, diffused, utilized for the common good, and that it can ultimately be eliminated altogether from political relationships” (Herz, 1950, p. 158). Realism recognizes the role that power plays in dictating the action of actors (in that actors *want* power), whereas Idealism sees maintaining harmony (sometimes even at the expense of one’s own interests for the greater good) as the driving force behind actors’ decisions.

According to Herz, history shows that the rise of the nation-state led to the development of a security dilemma since “not perceiving a common enemy, they would turn against each other....in an ensuing competition for power” (Herz, 1950, p. 163). This was due to the strong identity tied to that of a given nationality, also known as “nationalism,” which led groups to be formed along common bonds, such as language, in order to seek harmony (Herz, 1950, p. 162). Thus, it is important to note that the sense of harmony comes from and is found within that group identity (nationalist identity in Herz’s article) and that is the vehicle in which to protect and defend one’s harmony. Ultimately, Herz’s point is that in spite of the “ism” one tries to use (be it Marxism, Idealism, or Realism), or the reason to gather as a group (harmony or worker’s rights), it is all to maintain and/or gain power at the cost of another (Herz, 1950, p. 168-169) – thus leading to a security dilemma because the international system is anarchic and security issues and protecting one’s power is what counts the most.

This security dilemma leads to conflict spirals between groups in an effort to maintain/gain power relative to one another. The main interest of each group is to be the most powerful, or at least *as* powerful as the groups that surround them. Political realism outlines all of this for state politics, however, it holds true in the microcosm that is intrastate relations between groups. This tendency to compete amongst each other is what creates the conflict spiral, which begins with escalating actions amongst the groups.

Escalation

Pruitt and Kim (2004) define one type of escalation seen in conflicts as a “conflict spiral” which “holds that escalation results from a vicious circle of action and reaction” (Pruitt & Kim, 2004, p. 96). The motivation to escalate the conflict is two-fold: to punish (seek revenge on Other for a real or perceived harm), and to defend/deter from future attacks (Pruitt & Kim, 2004,

p. 96-97). This need to punish and to deter makes it difficult to stop the escalation within this conflict spiral since a failure to retaliate has the risk of being perceived as “weakness” leading to a bigger attack from Other (Pruitt & Kim, 2004, p. 97). This is only reinforced by group-think egging the conflict on, since an individual feels more secure acting negatively when they feel they have the support of a group behind them.

Below is a chart (Pruitt 2003) showing the results of an experiment testing the tactics used in response to a provocation (Pruitt, 2003, p. 23).

Level	Tactic	Individual	Group	Total
1.	Requests	7	0	7
2.	Demands	8	0	8
3.	Complaints	21	5	26
4.	Angry Statements	4	8	12
5.	Threats	0	4	4
6.	Harassment	1	7	8
7.	Abuse	0	7	7
Total		41	31	72

Pruitt makes the point that groups escalate far quicker than individuals do to provocation (Pruitt, 2003, p. 3). They react quicker and harsher than individuals do and are far more likely to use violent means than individuals. This affects the escalation between groups in conflict, as they are far more likely to take a turn towards violence much quicker than if it were just two individuals arguing. The old adage that there is “safety in numbers” is a concept well in play when it comes to conflict.

The Ethnic Security Dilemma

Drawing on the above theories in social psychology and international relations, Kew (2005) discusses the differences between the development of the State as seen in Africa as compared to Western Europe and the United States. The latter two were both mostly ethnically

homogenous and the political institutions were the result of “indigenous political processes” whereas the experience of the African state was a construct of the colonial powers handing over the reins to vastly ethnically diverse states created by false lines drawn on a map despite original pre-colonial borders (Kew, 2005, p. 150).

Additionally, the idea of the nation-state never truly caught on, but rather people held onto their pre-colonial ethnic identities that led to “political cultures [that] were based on ethnic ranking and distinction” (Kew, 2005, p. 151). This was only natural considering that often times, colonial powers had kept society divided by and aware of ethnic differences to maintain power and control over the population. Kew (2005) also points out the following:

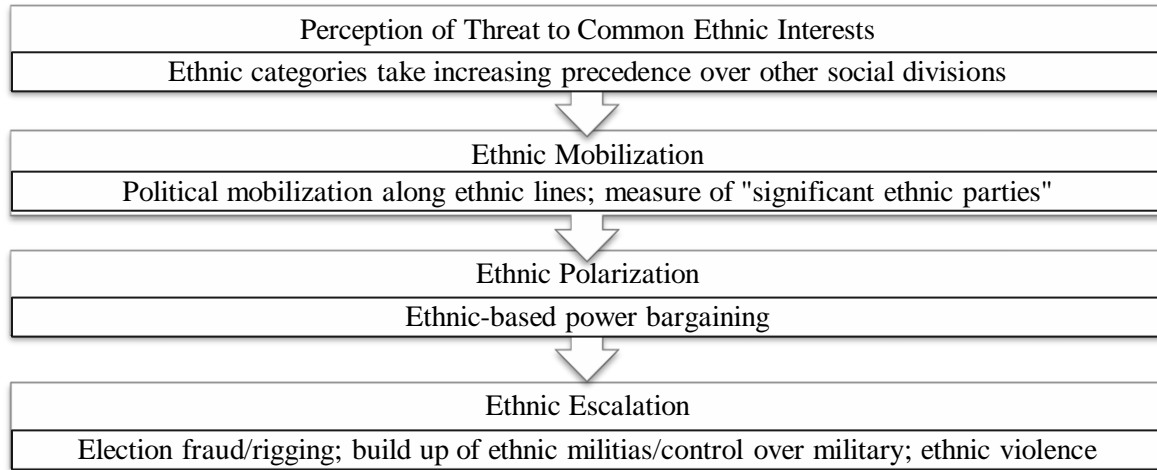
[w]ith ethnic groups seen as the primary units serving the interests of individuals, promoting ethnic-based interests became paramount, and the increase in power of one ethnic group was perceived as a relative decrease in the power of others and therefore a threat to their security and their interests (p. 151).

Rather than the priority being the creation of policies and institutions to govern effectively, this perceived threat from other ethnic groups is what takes precedent in politics of these African states leading to very unstable, and thus conflict-ridden, states.

The very anarchic nature of these states leads to a breeding ground for security dilemmas. The relative weakness of the State in either protecting or giving security to individuals, either in the form of economic, food, natural, or physical security, mean that individuals must rely on themselves to obtain security. However, it is always better to have someone stand next to you in a fight, rather than attempting to go at it alone, and with the strong ethnic identification that is prevalent in Africa, that means turning to one’s own ethnic group.

Analytical Framework

The diagram below shows the development of an ethnic security dilemma.

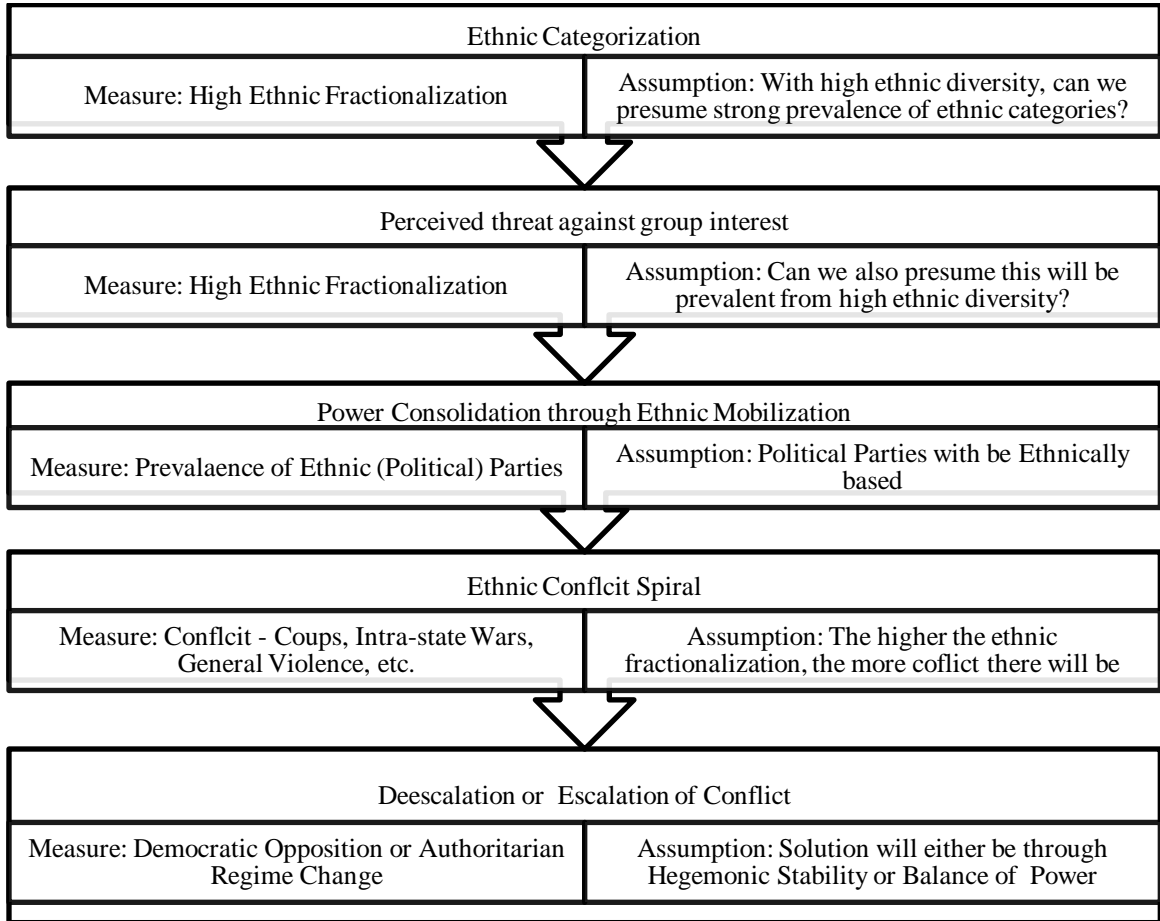


There is a constant struggle for power in countries affected by the security dilemma. Due to the fragile political systems in these countries, political leaders quickly face conditions of insecurity over the interests of the groups they represent. Social identity theory speaks to the importance of group identification and how perceived threats to one's identity can lead to conflict (Tajfel, 1974). As the perception of this threat grows, ethnicity crowds out other social categories upon which political mobilization could occur, such as class.

The lack of developed institutions within the country reinforces feelings of insecurity, and leaders increasingly feel the necessity to build a power-base along ethnic lines, leading initially to rigging elections, but at the most extreme, leading to attempts to control the military or building up their own ethnic militias. This creates escalation between the ethnic groups and a classic conflict spiral ensues, leading in many cases to armed conflict.

The below chart shows the sequence of the development of the ethnic security dilemma¹:

¹ Adapted from Darren Kew.



The above chart shows that an ethnic security dilemma begins with an increased interest of a population in ethnic categorization. The assumption here is that more ethnically diverse states will have more ethnic categorization, which ultimately, as the sequence moves on, will lead to more conflict. This heightened level of ethnic categorization in ethnically plural countries is explained by Tajfel (1973), who argued that social identity (of which ethnicity is one type) is not just knowing who you are, but also who you are not – such that the mere perception of a different ethnic group creates competition, in-group bias, and ultimately the feeling of perceived threat in other ethnic groups.

This perceived threat from the out-group is used by in-group leaders to consolidate power and mobilize the ethnic group, in order to present a united front against the perceived threat. This

is done through the creation and consolidation of ethnically based political parties. The mobilization of one group then leads to the mobilization of the other groups, such that increasingly contentious behavior arises. This spirals into the classic conflict spiral with retaliation from one group escalating the conflict further to the point of violence, typically in the form of coup attempts or even outright war. Upon the conclusion of the violence, either the conflict spiral starts once more, or the conflict de-escalates. The outcome of the conflict, de-escalation or the reigniting of conflict, are theorized to be affected by the type of government, such as a democracy with recognized opposition parties with the capacity for power sharing or an authoritarian regime.

Qualitatively, there seems to be much proof behind the idea of an ethnic security dilemma; however, this study tests if the qualitative reality presents itself in quantitative data through analysis of the role of ethnicity in conflict in sub-Saharan Africa. Thus, the first measure to test, as outlined in the above sequence of an ethnic security dilemma, is the level of ethnic diversity, or ethnic fractionalization, within African states and its effect on conflict, with the base assumption being that the more diverse countries would have more conflict. This follows the same logic as economists when showing the more ethnically diverse regions of the world also perform the poorest economically (Easterly & Levine 1997; Fearon 2003). When applied to the idea of conflict, the assumption is that with more ethnic groups, there is less of the pie to divide overall (Fisher, Ury, and Patton 1990) and thus strong allegiance to a group would be important in consolidating and maximizing power in competition with other groups fighting for the same resources (Tajfel 1973).

Methodology

The scope of this project began looking at all 54 countries in Africa, however, the scope has since been narrowed to just the 47 countries of Sub-Saharan Africa as there was more availability of data for these countries. To analyze an ethnic security dilemma, two parts needed to be collected: the ethnic information of each country, and measures of conflict and security for each country.

Measures Used

Relying on the works of Fearon and Posner, I have two measures of ethnic fractionalization for each country. Fearon's data (2003) is based on the ethno-linguistic breakdowns of each country (referred to as "ELF"), an updated version of the classic Russian study done in the 1960 which was the foundation of the Easterly & Levine article "Africa's Growth Tragedy, policies, and Ethnic Division" that was an economic study of how ethnic fractionalization adversely affected macroeconomic policies within African countries.

Whereas Posner (2004), for methodological and philosophical purposes, calculated an ethnic fractionalization number for each country based on only "Politically Relevant Ethnic Groups" (referred to as "PREG"), as in the groups that have a stake in the political process of their countries. As Posner states:

To capture the contribution that a country's ethnic heterogeneity makes to its policymaking process requires an index of fractionalization that reflects the groups *that are actually doing the competing over policy*, not the ones an ethnographer happens to identify as representing distinct cultural units. (p. 853).

Thus the importance of ethnic fractionalization measures should be found not in the fact there are distinct ethnic groups within a state, but rather there are distinct ethnic groups involved in the power dynamics of a state, and that is what the measures should be seeking to show. Posner's data speaks directly to the question of whether or not an ethnic security dilemma is a concern for sub-Saharan African countries, as countries with politically entrenched ethnic groups should prove to have more conflict since his data shows there is an adverse affect on a country's economic state when a country is more fractionalized (p. 861). Although the scope of his study does not include conflict, the competition that his measures seek to take into account, unlike other fractionalization measures, is part of the sequence of an ethnic security dilemma and thus shows the ethnic polarization being played out politically. Additionally, Posner calculated out the PREG decade rating for each country since the 1960s, showing that for most countries the level of ethnicity has remained constant since independence.²

To analyze the level of conflict in each country, I relied on 5 different measures to grasp the picture of conflict in Africa since independence. First, using the University of Michigan's most-up to date data from their Correlates of War Project, I listed every Intra-state war that has occurred since 1960 until 2007 for each country. Second, using a report by the Government of the United Kingdom, I broke down how many coups each country has experienced since independence.³ Third, I took the most recent Failed State Index rating compiled by the Fund for Peace.⁴ Fourth, I looked at the Freedom in the World data since 1972 for each country.⁵ My final

² There are a very few cases which shows variance in the numbers during the 80s and 90s, however every country, except for Kenya, show the same level of ethnic fractionalization at the time of his data collection (early 2000s) as they did in the 1960s. Kenya has been constant in their level of fractionalization since the 80s.

³ Any intrastate war up until 1993 involving Eritrea is counted as an intrastate war for Ethiopia.

⁴ A full discussion of the Failed State Index's methodology can be found at:
http://www.fundforpeace.org/web/index.php?option=com_content&task=view&id=99&Itemid=323

⁵ A full discussion behind the methodology of the Freedom in the World rating is computed can be found at:
http://www.freedomhouse.org/template.cfm?page=351&ana_page=363&year=2010.

measure was from the Institute for Economics and Peace, which has put out a yearly rating of each countries level of peace since 2007 known as the Global Peace Index.⁶

The UK report detailed coup data for each country, breaking the data down into four categories: (1) successful (defined as “seized central authority for at least one week”); (2) attempted; (3) plotted; and (4) alleged. For the purpose of my data collection, I am counting “successful” and “attempted” coups separately from “plotted” or “attempted” coups. Although the idea of a plot does perhaps show that there is instability or discontent among some of the population to the point where they think an overthrow of government is the only solution (thus showing the entire lack of faith in any democratic/political means to ameliorate their position), the politicization of accusations of plotting coups as a means to discredit opposition occurs frequently and is thus just a tool for political manipulation by the ruling party/leader, thus a symptom of the ethnic security dilemma, as opposed to being an actualization of the ethnic security dilemma when parties actually act on the insecurity by staging a coup.

The Failed State Index measures twelve economic, political, and social indicators in determining whether or not a State is to be considered “failed” or not. The rating scores each country on these twelve indicators on a score between 0-10, with a score of 120 being the highest, and the most failed. A score of 90 or above puts a country in the “Alert” category for being a Failed State. Of the 177 countries that were part of this year’s ratings, 37 were in this category – 21 of those countries being found in sub-Saharan Africa. A score between 60 and 89.9 puts a country in the “Warning” category for being a Failed State, and 91 countries were in this category. A score between 30 and 59.9 puts a country in the “Moderate” chance of failure

⁶ A full discussion of the Global Peace Index methodology can be found at: <http://www.visionofhumanity.org/gpi-data/#/2010/scor>

category, and 34 countries belonged in the group. A score between 0 and 29.9 puts a country in the “Sustainable” category with little chance of failure, and 12 states belong in this category.

Indicators Measured by the Failed State Index
1. Mounting Demographic Pressures
2. Massive Movement of Refugees or Internally Displaced Persons creating Complex Humanitarian Emergencies
3. Legacy of Vengeance-Seeking Group Grievance or Group Paranoia
4. Chronic and Sustained Human Flight
5. Uneven Economic Development along Group Lines
6. Sharp and/or Severe Economic Decline
7. Criminalization and/or Delegitimization of the State
8. Progressive Deterioration of Public Services
9. Suspension or Arbitrary Application of the Rule of Law and Widespread Violation of Human Rights
10. Security Apparatus Operates as a "State Within a State"
11. Rise of Factionalized Elites
12. Intervention of Other States or External Political Actors

Another measure of security within each country was taken from the Freedom in the World datasets who have annually ranked countries’ political rights and civil liberties since 1972. This is an important measure of conflict since political oppression is a form of violence against a state’s citizens. I collected the data for each sub-Saharan country of Africa, starting in 1972, then 1975 and after that every 5 years until the 2011 data showing the 2010 numbers. From that raw data, I then went through and came up with an average rating between the political rights rating and the civil liberties rating for each 5 year period (so a country with a political rights rating of “4” and a civil liberties rating of “6” would show as an average “5” within the dataset). This average gives the rating which shows whether a country is considered “Free” (rating of a 1-2.5), “Partly Free” (rating of a 3 – 5), or “Not Free” (a rating of a 5.5 - 7).

Finally, the Institute for Economics and Peace has created a measure of 23 different indicators that speak to the level of peace in each of the 149 countries they rank. Their scale is

based on a rating of 1-5 with 1 being the most at peace and 5 being the least peaceful. The 23 indicators fall into the following categories: measures of ongoing domestic and international conflict, measures of social safety and security, and measures of militarism. Internal factors were weighed heavier than external factors, taking into the reality of how conflict is happening more inside state-borders since the end of the cold war. For example, New Zealand was the most peaceful state with a rating of 1.188 and Iraq was the least peaceful this past year with a rating of 3.406.

Indicators Measured by the Global Peace Index
1. Number of external and internal conflicts fought: 2003-08
2. Estimated number of deaths from organized conflict (external)
3. Number of deaths from organized conflict (internal)
4. Level of organized conflict (internal)
5. Relations with neighboring countries
6. Perceptions of criminality in society
7. Number of refugees and displaced people as a percentage of the population
8. Political instability
9. Level of respect for human rights (Political Terror Scale)
10. Potential for terrorist acts
11. Number of homicides per 100,000 people
12. Level of violent crime
13. Likelihood of violent demonstrations
14. Number of jailed population per 100,000 people
15. Number of internal security officers and police per 100,000 people
16. Military expenditure as a percentage of GDP
17. Number of armed services personnel per 100,000 people
18. Volume of transfers (imports) of major conventional weapons per 100,000 people
19. Volume of transfers (exports) of major conventional weapons per 100,000 people
20. Budget support for UN peacekeeping missions: percentage of outstanding payments versus annual assessment to the budget of the current peacekeeping missions
21. Aggregate number of heavy weapons per 100,000 people
22. Ease of access to small arms and light weapons
23. Military capability/sophistication

Methodology of Analysis

To provide an accurate picture of how ethnicity may play a role in conflict in Africa, I used an objective regression analysis on the meta-data table in Appendix A testing whether or not the level of ethnic fractionalization of each country affected the five measures of conflict within each country. The null-hypothesis I tested was “the level of ethnic fractionalization will not affect the measures of conflict.” For any data cell that was not filled (for example, Fearon does not give a fractionalization rating for Comoros), then the “NA” was replaced with a zero (0). I tested at a 95% confidence level and would reject my null-hypothesis if the observed significance level was greater than or equal at the .05 level (likelihood of extreme outcomes occurring less than 5% of the time). Within the results, an asterix is used to indicate a rejection of the null-hypothesis.

First, I did a multiple-regression analysis using both the ethno-linguistic fractionalization rating and the politically relevant ethnic groups’ fractionalization rating, however the results were not useful since some of the ELF ratings and the PREG ratings are the same, thus interfering with the test. Additionally, although it did show significance and non-significance, it was not the appropriate test I was looking for in showing where precisely ethnic fractionalization may influence conflict. Thus, I did a uni-variance regression analysis for each dependent variable (the five measures of conflict) compared to the two separate independent variables (ELF and PREG).

Given the differences between the two datasets in calculating the level of fractionalization of each country (a full discussion of which can be found in my analysis); I wanted to mitigate any bias that using one calculation of fractionalization over the other might enter into the discussion of my analysis. Also, I thought it important to see if there would be any

differences or similarity in any trends of conflict between the two. In looking at the role of ethnicity in conflict, and since there are at times significant difference between ethnolinguistic groups' fractionalization ratings and politically relevant ethnic groups ratings, I also wanted to test which one, if any, may be more useful in comparing ethnic fractionalization to conflict within countries, much as Posner did when comparing ethnicity to economic growth of each country. Taking the two different ratings were additionally important given the findings of Posner's data which shows that the difference between global trends and the regional are perhaps explained because the wrong type of data was used in looking at political behavior (i.e. setting macroeconomic policies within a country), and since conflict manifests itself politically but also non-politically, it was necessary to view both ratings equally when comparing to the measures of conflict.

ELF rating v. PREG rating of Each Country

Below shows the breakdown of ethnic fractionalization within each country of sub-Saharan Africa; the first column shows the overall ethnic diversity of the country (the ethnolinguistic breakdown) and the next column shows the ethnic diversity of the politically relevant ethnic groups within that country.

Country (Year of Independence)	Ethnolinguistic Fractionalization	PREG Fractionalization
Angola (1975)	0.756	0.65
Benin (1960)	0.622	0.3
Botswana (1966)	0.351	0
Burkina Faso (1960)	0.704	0
Burundi (1962)	0.328	0.26
Cameroon (1961)	0.887	0.71
Cape Verde (1975)	NA	NA
Central African Republic (1960)	0.791	0.23
Chad (1960)	0.772	0.66
Comoros	NA	NA
Congo (Brazzaville), Republic of the (1960)	0.88	0.19
Congo, Democratic Republic of (DRC) (1960)	0.933	0.8
Cote d'Ivoire (1960)	0.784	0.49

An Ethnic Security Dilemma in Africa?

Cassidy M. Evans

Djibouti (1977)		0.606	NA
Equatorial Guinea (1968)	NA		0.19
Eritrea (1993)		0.647	NA
Ethiopia (1936-1941)		0.76	0.57
Gabon (1960)		0.857	0.21
Gambia, The (1965)		0.764	0.37
Ghana (1957)		0.846	0.44
Guinea (1958)		0.669	0.59
Guinea-Bissau (1974)		0.818	0.05
Kenya (1963)		0.852	0.57
Lesotho (1966)		0.255	0
Liberia (1847)		0.899	0.62
Madagascar (1960)		0.861	0
Malawi (1964)		0.829	0.55
Mali (1960)		0.754	0.13
Mauritius (1968)		0.632	0.6
Mozambique (1975)		0.765	0.36
Namibia (1988)		0.724	0.55
Niger (1960)		0.637	0.51
Nigeria (1960)		0.805	0.66
Rwanda (1962)		0.18	0.26
Sao Tome and Principe (1975)	NA		NA
Senegal (1960)		0.727	0.14
Seychelles (1976)	NA		0
Sierra Leone (1961)		0.764	0.56
Somalia (1960)		0.812	0
South Africa (1961)		0.88	0.49
Sudan (1956)		0.708	0.41
Swaziland (1968)		0.28	0
Tanzania (1964)		0.953	0.59
Togo (1960)		0.883	0.49
Uganda (1962)		0.93	0.63
Zambia (1964)		0.726	0.71
Zimbabwe (1980)		0.366	0.41

It is important to see both numbers as there are some interesting differences between them. For instance, Rwanda is the least fractionalized state in sub-Saharan Africa when only taking into account ethnolinguistic differences; however the history of the violent conflict in 1994 speaks to a different reality on the ground. Looking at the PREG rating however, it shows there are roughly four ethnic groups that must be taken into account when looking at the political

landscape of the country – a more reasonable finding if one takes into account the history of Rwanda. Another interesting situation can be found in Zimbabwe, where the ethnolinguistic grouping of the country shows a fractionalization that is less than the political groupings of the citizens of Zimbabwe. Thus, although anthropologists may not objectively find any differences between certain people, the Zimbabweans consider themselves be far more divisive when it comes to ethnic allegiance.

A more understandable reading of the differences between the ELF rating and the PREG rating is found in the Nigerian case, where although there is an 80% chance of two people selected at random to not be from the same ethnic group (or a .8 level of ethnolinguistic fractionalization), there is only a 66% chance they will not be from the same politically relevant ethnic group (a .66 level of PREG fractionalization). Given that there are three main ethnic groups in Nigeria in which much of the power shifts - the Hausa, Yoruba, and Ibo – the PREG rating is definitely the much more accurate rating. Another significant difference is the case of Somalia who according to the ELF rating has a .812 level of fractionalization, but according to the PREG rating has a null level of fractionalization. Somalia is one of the most conflicted countries in sub-Sahara Africa, so the difference in these ratings speak to an underlying question of what could be one of the factors on conflict in Africa: the ethnolinguistic groups or the just the political relevant ethnic groups? My analysis will seek to provide an answer that question.

Results

<i>Regression Analysis for Ethnolinguistic Fractionalization (ELF) Rating</i>	P-Value	T Stat	R-square	Percent of Impact (R-square)
Number of Wars	0.146	1.48	0.046	5%
Years at War	0.256	1.15	0.028	3%
Number of Successful/Attempted Coups	0.251	1.16	0.029	3%
Number of Plotted/Alleged Coups	0.323	0.99	0.022	2%

An Ethnic Security Dilemma in Africa?

Cassidy M. Evans

Failed State Index Rating	0.526	0.63	0.008	.08%
Freedom in the World 2010 Rating	0.466	0.73	0.012	1%
Global Peace Index	0.003*	3.13	0.179	18%
* indicates significance at the .05 level/ rejection of null-hypothesis.				

<i>Regression Analysis for Politically Relevant Ethnic Groups' Fractionalization (PREG) Rating</i>	P-Value	T Stat	R-square	Percent of Impact (R-square)
Number of Wars	0.003*	3.11	0.177	18%
Years at War	0.026*	2.30	0.105	11%
Number of Successful/Attempted Coups	0.457	0.75	0.012	1%
Number of Plotted/Alleged Coups	0.163	1.42	0.043	4%
Failed State Index Rating	0.103	1.66	0.058	6%
Freedom in the World 2010 Rating	0.773	0.29	0.002	.2%
Global Peace Index	0.014*	2.54	0.126	13%
* indicates significance at the .05 level/ rejection of null-hypothesis.				

Discussion

Given the history of conflict in Africa, assuming there is a security dilemma within states is logical, but to say there is an *ethnic* security dilemma means taking a deeper look into the types of conflicts and the general stability of each state. The evolution and history of each state in sub-Saharan Africa is different, and some may be farther along the path to peace since independence than others, thus it was important that the measures used in this analysis covered both physical conflict (open warfare and levels of violence) and political conflict (political instability/coups and political repression), allowing for a variety of types of conflicts to manifest themselves within the data. Clearly there is violence in sub-Saharan Africa; however, the distinction must be made between saying there is an *ethnic* security dilemma, with the focus then being placed on ethnicity as the cause, as opposed to a security dilemma in which ethnicity may

play a small factor in some way among other factors that may be just as or more determinant in provoking the dilemma. The conclusions from my data do not support the idea of an ethnic security dilemma, but it does support the idea of a security dilemma in which ethnicity has a role.

The results show that the level of ethnolinguistic fractionalization within each country has no significant impact on the number of intrastate wars a state will have, how long those wars will last, the number of successful/attempted/plotted/alleged coups in a state, the rating on the failed state index or the level of political freedom in each state. The level of ethnolinguistic fractionalization is highly significant in determining the rating on the global peace index with the most fractionalized states also rating lower (and thus less peaceful) on the global peace index.⁷ However, it only accounts for 18% of the impact, meaning there are other factors that influence 82% of the rating and thus we cannot use ethnolinguistic fractionalization to create a predictive model nor use it to base an idea of an ethnic security dilemma.

The results show that the level of fractionalization of politically relevant ethnic groups (PREG) in a state does not have a statistically significant effect on the number of successful/attempted/plotted/alleged coups, the failed state index rating, or the level of political freedom within each state. PREG has a highly significant impact on the number of wars within a state and shows that the more fractionalized states also have the most wars; however it only accounts for a total of 18% of the impact, and thus is not useful in creating any predictive models nor can be used to base the assumption of an ethnic security dilemma. Unsurprisingly, PREG also has a significant impact on the total years of war within a state and shows that the more fractionalized states also have been at war the longest; however it only accounts for a total of 11% of the impact, and thus is not useful in creating any predictive models nor has enough

⁷ Please see Appendix B for the Line Fit Plot Graph

impact to be able to isolate. Once more, the Global Peace Index Rating is significantly impacted by the level of fractionalization with the most PREG fractionalized states also having higher ratings on the global peace index, indicating more conflict; however PREG only has a 13% impact and thus, once more, cannot be used to make any predictive models nor used to base the assumption of there being an ethnic security dilemma present.

In comparing the ELF results to the PREG results, there is a solidification of Posner's original hypothesis that the more precise measure to use when looking at ethnic fractionalization within a country is the politically relevant ethnic groups' fractionalization as opposed to the ethnolinguistic fractionalization level. The politically relevant ethnic groups in a country are the movers and shakers of society and would be at the heart of any conflict, and it is important to note that it is not the most fractionalized population in general which is more likely to go to war, but rather just the most fractionalized on the political level. Furthermore, there seems to be a very low threshold for how many politically relevant ethnic groups a society can have before it is significant on the measures of conflict. As in, it is not important that there are many ethnic groups fighting over political power, nor that they have equal size and strength, but it could just be the fact there is one other politically relevant ethnic group present and vying for political power that leads to conflict. However, as said above, the impact ethnic fractionalization has on the measures of conflict is not large enough to assume any real responsibility for creating or maintaining conflict within ethnically divided states. It is part of the overall picture, but only a very small one.

Interestingly, the only measure that showed equal amounts of significance from both ELF and PREG was not a measure of conflict but rather a measure of the absence of conflict, the global peace index. Unlike the other results, the Global Peace Index was more impacted by

ethnolinguistic fractionalization than the politically relevant ethnic fractionalization with ELF accounting for 18% of the impact on the Global Peace Index and PREG only accounting for 13% of the impact on the same measure. However, the absence of conflict in states with less fractionalization, although the opposite side of the same coin of the base assumption of an ethnic security dilemma, cannot be used to say states with the most ethnic fractionalization will also be the least peaceful, but rather only shows that the least fractionalized states, both ethnolinguistically and politically, experience more peace. That is very different than saying the more ethnically diverse states will experience more conflict. The results show that not to be the case, and in fact ethnic fractionalization levels would be useless in predicting levels of conflict within a country. The driving force behind the peace is not obtained by the measure, and since the Global Peace Index takes into account many indices of its own within its calculations, the preciseness of these results cannot be ascertained. Regardless of the preciseness, the impact of both levels of fractionalization on the rating only capture a very small part of the overall picture, and still cannot be looked to as the driving force or cause of peace or conflict within a state.

It perhaps seems contradictory to say that the levels of fractionalization have a significant effect on the global peace index, for solely PREG fractionalization, and on the number of intrastate wars and their duration, and yet have little impact overall on the outcome of those measures, making ethnicity useless as “the cause” for conflict. However, it just means that ethnicity cannot be looked to as the *main* cause for conflict, not that it may not play any role at all. Clearly, of the small portion of the conflict measures that ethnic fractionalization does affect, its role is important; how important or in what way is not captured by this quantitative analysis, but turning towards the framework of the ethnic security dilemma provides a direction for future research in which to resolve the above quandary.

An ethnic security dilemma begins with the categorization of ethnic groups and then moves towards group mobilization because of a perceived threat against a group. One of the assumptions of ethnic security dilemma theory is that the more ethnic groups there are within a society, the more insecurity will arise among the different ethnic groups because there would be less of the overall pie to divide, thus heightening perceived threats to a group and escalating into violence. The above data shows, however, that the number of different ethnic groups is not important, but rather only that there is at least one other ethnically-different identifiable group within the state. For instance, it does not capture whether or not having just another group is enough to be considered the “perceived threat” that sets off the conflict spiral and where the key cause of the conflict within a state would be found.

We know conflict in Africa is often divided between ethnicities. Turning to CNN or BBC will capture that fact; however, it does not mean that ethnic fractionalization is the cause for the conflict. The data shows that overall, the number of ethnic groups within a country is not a deciding factor as to whether or not the country will experience conflict. Its lack of effect on the other three measures, the failed state index, the level of political freedom, and amount of coups experienced within a state, raises the point that ethnicity alone is not the cause of sub-Saharan Africa’s problems, but it does have a role in some way for two of the five measures of conflict: the global peace index and intrastate wars. There is something about ethnicity within sub-Saharan Africa that should be compared to other potential causes, such as the economic policy competition looked at by Posner and Fearon, to help pinpoint what is setting off the “perceived threat” felt by ethnic groups.

This “perceived threat” has led to a total of about 155 years of intra-state war in Africa since independence, but what is causing those wars remains a matter of debate. The above

findings are in direct contrast to the picture painted by most sources on the ground who equate sub-Saharan African conflict automatically with ethnically-based conflict. As these results show, the conflict is not because of ethnic division, and this is a factor that should not be considered as a root cause. This view is shared by Claude Ake (1973), a noted scholar of African politics who saw ethnicity as a red herring in the pursuit of resolving conflict in Africa. Thus, speaking in terms of an ethnic security dilemma” or “ethnic conflict” is misguided and should not be used when trying to capture the totality of the conflicts in sub-Saharan Africa. Although the cause of conflict has yet to be pinpointed, the field has been narrowed in at least we now know one suspected cause should not be considered as a major explanatory factor, and that research and resources could be better used exploring other suspected causes, such as economic, resource-driven, and social inequality causes.

Conclusion

Africa is one of the most conflicted continents in the world and one of the most ethnically diverse continents in the world. The purpose of this project was to see if there was a correlation between those two facts in relation to the idea of an ethnic security dilemma in sub-Saharan Africa. An ethnic security dilemma is defined as a conflict spiral between two or more ethnic groups, and although a twist on a classic realist notion, an important one given the specific set of challenges that the multi-ethnic states of Africa face.

Reading the struggles in Africa, it is easy to assume that there is some sort of ethnic security dilemma. The corrupt patronage system in Africa, endemic since independence, naturally flows through ethnic lines since that would be who people knew at the time of independence. Ethnic groups were concentrated in small areas and little intermingling occurred. Thus, a lot of benefits would go to one group early on, and that situation has snowballed into

what we currently see today in Africa. However, quantitatively, no patterns emerge pointing to a connection between levels of ethnic diversity and levels of conflict. Aside from the economic data done by Posner, showing that increased ethnic diversity leads to negative economic growth, which speaks to the issue of ethnic competition that is the heart of a security dilemma, nothing definitive emerges from the data. The current accepted measures of peace and conflict within the field of conflict resolution show that Africa, the most ethnically diverse continent, is also the most conflicted. However, when looking at the regional data, the correlation between high ethnicity and high levels of conflict disappears as an indicator for likelihood of peace or conflict just as it does when economists look at the role ethnicity plays in determining economic success of countries.

Saying that there is an ethnic security dilemma in Africa is too simple. It alludes to the idea that if we can resolve the “ethnic issue” then peace would be more likely in Africa. Even if ethnicity was removed from the equation, people would just use another typology to group themselves by and to identify the “Other” allowing for conflict. The results show it is not important how many other ethnic groups there are within a state; just that there are identifiable groups in which to attack and blame, but it does not support the importance of the other group being linked to ethnic identity. Threats to social identity have been shown by others (Tajfel 1973) as having a very large role into the cause of conflict, however social identity is much larger than just ethnic identity, and threats to ethnic social identity cannot be seen as the cause for conflict within sub-Saharan Africa.

There is something else, or perhaps more likely, multiple causes, that drive continued conflict in the tragedy that many African states face. The scope of this study only provides one answer as to what conflict most likely cannot be categorized in sub-Saharan Africa, but does not

provide any indication as to what a potential root cause *could* look like, if one even exists. However, whether or not ethnicity is a cause of conflict, history shows it is a reoccurring divider for conflict in Africa, and future research should be undertaken to explore better measures as to the role ethnic identity plays in fueling conflict rather than in creating it. Breaking that cycle is perhaps the key to mitigating conflict in Africa.

References

- Ake, C. (1973). Explaining political instability in new states. *The Journal of Modern African Studies*. 11(3), 347-359.
- Alesina, Alberto, Arnaud Devleeschauwer, William Easterly, Sergio Kurlat, and Romain Wacziarg. (2003). Fractionalization. *Journal of Economic Growth* 8(June), 155–94.
- Barth, F. (1969) *Ethnic groups and boundaries*. Boston: Little, Brown.
- Easterly, W, & Levine, R. (1997). Africa's growth tragedy: policies and ethnic division. *The Quarterly Journal of Economics*, 112(4), 1203-1250.
- Fearon, J. D. (2003). Ethnic and cultural diversity by country. *Journal of Economic Growth* 8(June):195–222.
- Herz, J.H. (1950). *Idealist internationalism and the security dilemma*.
- Horowitz, D.L. (1985). *Ethnic groups in conflict*. Berkeley and Los Angeles, California: University of California Press.
- Joseph, R., Prempeh H., Barkin J., and Diamond, L. (2008) Progress and retreat in Africa. *Journal of Democracy*: 19(2), 94-108
- Kelman, H.C. (1999). The interdependence of Israeli and Palestinian national identities: the role of the other in existential conflict. *Journal of Social Issues*, 55(3), 581-600
- Kew, D. (2005). Building democracy in 21st century africa: two africas, one solution. *The Whitehead Journal of Diplomacy and International Relations*, Winter/Spring, 149-161.
- Kissinger, H. (1994) *Diplomacy*. New York, New York: Simon & Schuster
- Morgenthau, H.J. (1978) *Politics Among Nations: The Struggle for Power and Peace*, Fifth Edition, Revised, New York: Alfred A. Knopf

- Nagel, J. (1994). Constructing ethnicity: creating and recreating ethnic identity and culture. *Social Problems*, 41(1), 152-176.
- Pruitt, D, & Kim, S. (2004). *Social conflict: escalation, stalemate, and settlement*. New York, New York: McGraw-Hill Higher Education.
- Pruitt, D. "Escalation, Readiness for Negotiation, and Third Party Functions"
- Posner, Daniel (2004). Measuring ethnic fractionalization in Africa. *American Journal of Political Science*. 48(4). October 2004. 849-863.
- Sarkees, Meredith Reid and Frank Wayman (2010). Correlates of War Project Datasets: *Resort to War: 1816 - 2007*. CQ Press.
- Sklar, R. (1983) Democracy in Africa. *African Studies Review*. 26(3/4 Sep. – Dec. 1983), 11-24.
- Tajfel, H. (1974). Social identity and intergroup behaviour. *Social Science Information*, 13(2), 65-93.

Appendix A

Country (Year of independence)	PREG60 (Posner)	PREG70 (Posner)	PREG80 (Posner)	PREG90 (Posner)
Angola (1975)	0.65	0.65		0.65
Benin (1960)	0.3	0.3		0.3
Botswana (1966)	0	0		0
Burkina Faso (1960)	0	0		0
Burundi (1962)	0.26	0.26		0.26
Cameroon (1961)	0.71	0.71		0.71
Cape Verde (1975)	NA	NA	NA	NA
Central African Republic (1960)	0.23	0.23		0.23
Chad (1960)	0.66	0.66		0.66
Comoros	NA	NA	NA	NA
Congo (Brazzaville), Republic of the (1960)	0.19	0.19		0.19
Congo, Democratic Republic of (DRC) (1960)	0.8	0.8		0.8
Cote d'Ivoire (1960)	0.49	0.49		0.49
Djibouti (1977)	NA	NA	NA	NA
Equatorial Guinea (1968)	0.19	0.19		0.19
Eritrea (1993)	NA	NA	NA	NA
Ethiopia (1936-1941)	0.57	0.57		0.54
Gabon (1960)	0.21	0.21		0.21
Gambia, The (1965)	0.37	0.37		0.48
Ghana (1957)	0.44	0.44		0.44
Guinea (1958)	0.48	0.48		0.59
Guinea-Bissau (1974)	0.05	0.05		0.05
Kenya (1963)	0.43	0.43		0.57
Lesotho (1966)	0	0		0
Liberia (1847)	0.01	0.01		0.62
Madagascar (1960)	0	0		0
Malawi (1964)	0.55	0.55		0.55
Mali (1960)	0.13	0.13		0.13
Mauritius (1968)	0.6	0.6		0.6
Mozambique (1975)	0.36	0.36		0.36
Namibia (1988)	0.55	0.55		0.55
Niger (1960)	0.51	0.51		0.51
Nigeria (1960)	0.66	0.66		0.66
Rwanda (1962)	0.26	0.26		0.26
Sao Tome and Principe (1975)	NA	NA	NA	NA
Senegal (1960)	0.14	0.14		0.33
Seychelles (1976)	0	0		0
Sierra Leone (1961)	0.56	0.56		0.6
Somalia (1960)	0	0		0
South Africa (1961)	0.49	0.49		0.64
Sudan (1956)	0.41	0.41		0.41
Swaziland (1968)	0	0		0
Tanzania (1964)	0.59	0.59		0.59
Togo (1960)	0.49	0.49		0.49
Uganda (1962)	0.63	0.63		0.63

An Ethnic Security Dilemma in Africa?

Cassidy M. Evans

Zambia (1964)						0.71		0.71		0.71	
Zimbabwe (1980)						0.41		0.41		0.41	
PREG04 (Posner)	Ethnic Fract. (Fearon)	# of Intra- state Wars	Years in Conflict	# of Successful/ Attempted Coups	# of Plotted/Alleged Coups	FSI Rating (out of 120)	FSI Rank 2010 – out of 177	FiW 1972			
0.65	0.756	3	21	2	0	83.7	59	NA	Pr: 7		
0.3	0.622	0	0	10	0	76.8	93	Cl: 5	Pr: 3		
0	0.351	0	0	NA	NA	68.7	113	Cl: 4	Pr: 3		
0	0.704	0	0	5	1	90.7	35	Cl: 4	Pr: 7		
0.26	0.328	3	8	11	1	96.7	23	Cl: 7	Pr: 6		
0.71	0.887	0	0	1	2	95.4	26	Cl: 4			
NA	NA	0	0	NA	NA	77.2	88	NA	Pr: 7		
0.23	0.791	0	0	10	0	106.4	8	Cl: 7	Pr: 6		
0.66	0.772	5	11	10	0	113.3	2	Cl: 7			
NA	NA	0	0	9	3	85.1	52	NA	Pr: 7		
0.19	0.88	2	2	9	3	0	NA	Cl: 7	Pr: 7		
0.8	0.933	6	12	3	0	109.9	5	Cl: 6	Pr: 6		
0.49	0.784	1	2	5	1	101.2	12	Cl: 6			
NA	0.606	0	0	2	0	81.9	68	Pr: Cl:			
0.19	NA	0	0	6	1	88.5	44	Cl: 6			
NA	0.647	0	0	NA	NA	93.3	30	NA	Pr: 5		
0.57	0.76	8	11	6	0	98.8	17	Cl: 6	Pr: 6		
0.21	0.857	0	0	1	0	75.3	98	Cl: 6	Pr: 2		
0.37	0.764	0	0	4	0	80.2	75	Cl: 2	Pr: 6		
0.44	0.846	0	0	10	2	67.1	122	Cl: 6	Pr: 7		
0.59	0.669	1	1	4	6	105	9	Cl: 7			
0.05	0.818	1	1	7	3	97.2	22	NA	Pr: 5		
0.57	0.852	0	0	1	1	100.7	13	Cl: 4	Pr: 7		
0	0.255	0	0	5	3	82.2	67	Cl: 4			
0.62	0.899	4	6	6	7	91.7	33	Pr: 6			

An Ethnic Security Dilemma in Africa?

Cassidy M. Evans

									Cl: 6
									Pr: 5
	0	0.861	0	0	4	1	82.6	64	Cl: 3
									Pr: 7
	0.55	0.829	0	0	0	1	93.6	28	Cl: 6
									Pr: 7
	0.13	0.754	0	0	3	5	79.3	78	Cl: 6
									Pr: 3
	0.6	0.632	0	0	NA		44.4	151	Cl: 2
	0.36	0.765	0	0	0	1	81.7	69	NA
									Pr: 6
	0.55	0.724	0	0	NA		74.5	100	Cl: 5
									Pr: 6
	0.51	0.637	0	0	4	3	97.8	19	Cl: 6
									Pr: 6
	0.66	0.805	4	6	8	7	100.2	14	Cl: 4
									Pr: 7
	0.26	0.18	4	4	1	1	88.7	40	Cl: 6
NA	NA	NA	0	0	NA		75.8	97	NA
									Pr: 6
	0.14	0.727	0	0	1	0	74.6	99	Cl: 6
	0	NA	0	0	NA		67.9	115	NA
									Pr: 4
	0.56	0.764	2	7	11	3	93.6	28	Cl: 5
									Pr: 7
	0	0.812	3	11	4	1	114.3	1	Cl: 6
									Pr: 2(5)
	0.49	0.88	0	0	0	1	67.9	115	Cl: 3(6)
									Pr: 6
	0.41	0.708	3	30	13	12	111.8	3	Cl: 6
									Pr: 4
	0	0.28	0	0	1	3	82.8	63	Cl: 2
									Pr: 6
	0.59	0.953	1	1	2	2	81.2	72	Cl: 6
									Pr: 7
	0.49	0.883	0	0	11	2	88.1	47	Cl: 5
									Pr: 7
	0.63	0.93	3	8	5	4	97.5	21	Cl: 7
									Pr: 5
	0.71	0.726	0	0	3	3	83.9	56	Cl: 5
									Pr: 6
	0.41	0.366	1	7	0	3	110.2	4	Cl: 5

Average 1972	FiW 1975 Pr: 6 Cl:	Average 1975	FiW 1980 Pr: 7 Cl: 7	Average 1980	FiW 1985 Pr: 7 Cl:	Average 1985	FiW 1990 Pr: 7 Cl:
NA	6	6	7	7	7	7	7
	6 Pr: 7 Cl:	7	7 Pr: 7 Cl: 6	6.5	7 Pr: 7 Cl:	7	7 Pr: 6 Cl:

An Ethnic Security Dilemma in Africa?

Cassidy M. Evans

	7			7		4
	Pr: 2 Cl:			Pr: 2 Cl:		Pr: 1 Cl:
3.5	3	2.5	Pr: 2 Cl: 3	2.5	3	2.5
	Pr: 6 Cl:			Pr: 7 Cl:		Pr: 6 Cl:
3.5	4	5	Pr: 6 Cl: 5	5.5	6	6.5
	Pr: 7 Cl:			Pr: 7 Cl:		Pr: 7 Cl:
7	6	6.5	Pr: 7 Cl: 6	6.5	6	6.5
	Pr: 6 Cl:			Pr: 6 Cl:		Pr: 6 Cl:
5	4	5	Pr: 6 Cl: 6	6	7	6.5
	Pr: 5 Cl:			Pr: 6 Cl:		Pr: 5 Cl:
NA	5	5	Pr: 6 Cl: 6	6	7	6.5
	Pr: 7 Cl:			Pr: 7 Cl:		Pr: 6 Cl:
7	7	7	Pr: 7 Cl: 5	6	6	6.5
	Pr: 7 Cl:			Pr: 7 Cl:		Pr: 7 Cl:
6.5	6	6.5	Pr: 7 Cl: 6	6.5	7	7
	Pr: 5 Cl:			Pr: 6 Cl:		Pr: 5 Cl:
NA	2	3.5	Pr: 4 Cl: 5	4.5	6	6
	Pr: 5 Cl:			Pr: 7 Cl:		Pr: 6 Cl:
7	6	5.5	Pr: 7 Cl: 6	6.5	6	6.5
	Pr: 7 Cl:			Pr: 7 Cl:		Pr: 6 Cl:
6.5	7	7	Pr: 6 Cl: 6	6	7	7
	Pr: 6 Cl:			Pr: 6 Cl:		Pr: 6 Cl:
6	5	5.5	Pr: 6 Cl: 5	6.5	5	5.5
	Pr: 3 Cl:			Pr: 6 Cl:		Pr: 6 Cl:
NA	4	3.5	Pr: 6 Cl: 6	6	5	5.5
	Pr: 6 Cl:			Pr: 7 Cl:		Pr: 7 Cl:
6	7	6.5	Pr: 7 Cl: 6	6.5	7	7
NA	NA	NA	NA	NA	NA	NA
	Pr: 7 Cl:			Pr: 7 Cl:		Pr: 7 Cl:
5.5	6	6.5	Pr: 7 Cl: 7	7	7	7
	Pr: 6 Cl:			Pr: 6 Cl:		Pr: 4 Cl:
6	6	6	Pr: 6 Cl: 6	6	6	6
	Pr: 2 Cl:			Pr: 3 Cl:		Pr: 2 Cl:
2	2	2	Pr: 2 Cl: 3	2.5	4	3.5
	Pr: 7 Cl:			Pr: 7 Cl:		Pr: 6 Cl:
6	5	6	Pr: 2 Cl: 3	2.5	6	6.5
	Pr: 7 Cl:			Pr: 7 Cl:		Pr: 6 Cl:
7	7	7	Pr: 7 Cl: 7	7	5	6
	Pr: 6 Cl:			Pr: 6 Cl:		Pr: 6 Cl:
NA	6	6	Pr: 6 Cl: 6	6	6	6
	Pr: 5 Cl:			Pr: 6 Cl:		Pr: 6 Cl:
4.5	5	5.5	Pr: 5 Cl: 4	4.5	5	6.5
	Pr: 5 Cl:			Pr: 5 Cl:		Pr: 6 Cl:
5.5	4	4.5	Pr: 5 Cl: 5	5	5	5
	Pr: 6 Cl:			Pr: 5 Cl:		Pr: 7 Cl:
6	4	5	Pr: 6 Cl: 5	5.5	5	5
	Pr: 5 Cl:			Pr: 5 Cl:		Pr: 4 Cl:
4	5	5	Pr: 6 Cl: 6	6	6	5.5
	Pr: 7 Cl:			Pr: 6 Cl:		Pr: 7 Cl:
6.5	6	6.5	Pr: 6 Cl: 7	6.5	7	6.5

An Ethnic Security Dilemma in Africa?

Cassidy M. Evans

	6.5	Pr: 7 Cl: 7	7	Pr: 7 Cl: 6	6.5	Pr: 7 Cl: 6	6.5	Pr: 6 Cl: 5
	2.5	Pr: 3 Cl: 2	2.5	Pr: 3 Cl: 3	3	Pr: 2 Cl: 2	2	Pr: 2 Cl: 2
NA	6	Pr: 6 Cl: 6	6	Pr: 7 Cl: 7	7	Pr: 6 Cl: 7	6.5	Pr: 6 Cl: 6
	5.5	NA	NA	NA	NA	NA	NA	Pr: 2 Cl: 3
	6	Pr: 7 Cl: 6	6.5	Pr: 7 Cl: 6	6.5	Pr: 7 Cl: 6	6.5	Pr: 6 Cl: 5
	5	Pr: 6 Cl: 5	5.5	Pr: 2 Cl: 3	2.5	Pr: 7 Cl: 5	6	Pr: 5 Cl: 5
	6.5	Pr: 7 Cl: 5	6	Pr: 6 Cl: 6	6	Pr: 6 Cl: 6	6	Pr: 6 Cl: 6
NA	5	Pr: 5 Cl: 5	5	Pr: 6 Cl: 6	6	Pr: 7 Cl: 7	7	Pr: 5 Cl: 5
	6	Pr: 6 Cl: 4	5	Pr: 4 Cl: 4	4	Pr: 3 Cl: 4	3.5	Pr: 4 Cl: 3
NA	NA	NA	NA	Pr: 6 Cl: 6	6	Pr: 6 Cl: 6	6	Pr: 6 Cl: 6
	4.5	Pr: 6 Cl: 5	5.5	Pr: 5 Cl: 5	5	Pr: 5 Cl: 5	5	Pr: 6 Cl: 5
	6.5	Pr: 7 Cl: 6	6.5	Pr: 7 Cl: 7	7	Pr: 7 Cl: 7	7	Pr: 7 Cl: 7
2.5(5.5)	5	Pr: 4 Cl: 5	4.5	Pr: 5 Cl: 6	5.5	Pr: 5 Cl: 6	5.5	Pr: 5 Cl: 4
	6	Pr: 6 Cl: 6	6	Pr: 5 Cl: 5	5	Pr: 6 Cl: 6	6	Pr: 7 Cl: 7
	3	Pr: 6 Cl: 4	5	Pr: 5 Cl: 5	5	Pr: 5 Cl: 6	5.5	Pr: 6 Cl: 5
	6	Pr: 6 Cl: 6	6	Pr: 6 Cl: 6	6	Pr: 6 Cl: 6	6	Pr: 6 Cl: 5
	6	Pr: 7 Cl: 6	6.5	Pr: 7 Cl: 6	6.5	Pr: 6 Cl: 6	6	Pr: 6 Cl: 6
	7	Pr: 7 Cl: 7	7	Pr: 4 Cl: 4	4	Pr: 5 Cl: 4	4.5	Pr: 6 Cl: 5
	5	Pr: 5 Cl: 5	5	Pr: 5 Cl: 6	5.5	Pr: 5 Cl: 5	5	Pr: 6 Cl: 5
	5.5	Pr: 6 Cl: 5	5.5	Pr: 3 Cl: 4	3.5	Pr: 4 Cl: 6	5	Pr: 6 Cl: 4
Average	Average	Average	Average	Average	Average	Average	Average	Average
1990	FiW 1995	1995	FiW 2000	2000	FiW 2005	2005	FiW 2010	2005
	Pr: 6 Cl: 7	6	Pr: 6 Cl: 6	6	Pr: 6 Cl: 5	5.5	Pr: 6 Cl: 5	5
	Pr: 2 Cl: 5	2	Pr: 2 Cl: 2	2	Pr: 2 Cl: 2	2	Pr: 2 Cl: 2	2
	Pr: 2 Cl: 1.5	2	Pr: 2 Cl: 2	2	Pr: 2 Cl: 2	2	Pr: 3 Cl: 2	2
	Pr: 5 Cl: 5.5	5.5	Pr: 4 Cl: 4	4	Pr: 5 Cl: 4	4	Pr: 5 Cl: 4	4

An Ethnic Security Dilemma in Africa?

Cassidy M. Evans

	4			3		3
	Pr: 6 Cl:			Pr: 3 Cl:		Pr: 5 Cl:
6.5	7	6.5	Pr: 6 Cl: 6	6	5	4
	Pr: 7 Cl:			Pr: 6 Cl:		Pr: 6 Cl:
6	5	6	Pr: 7 Cl: 6	6.5	6	6
	Pr: 1 Cl:			Pr: 1 Cl:		Pr: 1 Cl:
5	2	1.5	Pr: 1 Cl: 1	1	1	1
	Pr: 3 Cl:			Pr: 5 Cl:		Pr: 5 Cl:
5.5	4	3.5	Pr: 3 Cl: 4	3.5	4	4.5
	Pr: 6 Cl:			Pr: 6 Cl:		Pr: 7 Cl:
6.5	5	5.5	Pr: 6 Cl: 5	5.5	5	5.5
	Pr: 4 Cl:			Pr: 4 Cl:		Pr: 3 Cl:
5	4	4	Pr: 6 Cl: 4	5	4	4
	Pr: 4 Cl:			Pr: 5 Cl:		Pr: 6 Cl:
6	4	4	Pr: 6 Cl: 4	5	5	5
	Pr: 7 Cl:			Pr: 6 Cl:		Pr: 6 Cl:
6	6	6.5	Pr: 7 Cl: 6	6.5	6	6
	Pr: 6 Cl:			Pr: 6 Cl:		Pr: 7 Cl:
5	5	5.5	Pr: 6 Cl: 5	5.5	6	6
	Pr: 5 Cl:			Pr: 5 Cl:		Pr: 6 Cl:
5.5	6	5.5	Pr: 4 Cl: 5	4.5	5	5
	Pr: 7 Cl:			Pr: 7 Cl:		Pr: 7 Cl:
7	7	7	Pr: 7 Cl: 7	7	6	6.5
	Pr: 6 Cl:			Pr: 7 Cl:		Pr: 7 Cl:
NA	4	5	Pr: 7 Cl: 5	6	6	6.5
	Pr: 4 Cl:			Pr: 5 Cl:		Pr: 6 Cl:
7	5	4.5	Pr: 5 Cl: 5	5	5	5
	Pr: 5 Cl:			Pr: 6 Cl:		Pr: 6 Cl:
4	4	4.5	Pr: 5 Cl: 4	4.5	4	5
	Pr: 7 Cl:			Pr: 5 Cl:		Pr: 5 Cl:
2	5	6	Pr: 7 Cl: 6	6.5	4	4.5
	Pr: 4 Cl:			Pr: 1 Cl:		Pr: 1 Cl:
5.5	4	4	Pr: 2 Cl: 3	2.5	2	1.5
	Pr: 6 Cl:			Pr: 6 Cl:		Pr: 5 Cl:
5.5	5	5.5	Pr: 6 Cl: 5	6.5	5	5.5
	Pr: 3 Cl:			Pr: 4 Cl:		Pr: 4 Cl:
5.5	4	3.5	Pr: 4 Cl: 5	4.5	4	4
	Pr: 7 Cl:			Pr: 3 Cl:		Pr: 4 Cl:
6	6	6.5	Pr: 6 Cl: 5	5.5	3	3
	Pr: 4 Cl:			Pr: 2 Cl:		Pr: 3 Cl:
5.5	4	4	Pr: 4 Cl: 4	4	3	2.5
	Pr: 7 Cl:			Pr: 5 Cl:		Pr: 3 Cl:
7	6	6.5	Pr: 5 Cl: 6	5.5	4	4.5
	Pr: 2 Cl:			Pr: 3 Cl:		Pr: 6 Cl:
4	4	3	Pr: 2 Cl: 4	3	3	3
	Pr: 2 Cl:			Pr: 4 Cl:		Pr: 3 Cl:
6.5	3	2.5	Pr: 3 Cl: 3	3	4	4
	Pr: 2 Cl:			Pr: 2 Cl:		Pr: 2 Cl:
5.5	3	2.5	Pr: 2 Cl: 3	2.5	2	2
	Pr: 1 Cl:			Pr: 1 Cl:		Pr: 1 Cl:
2	3	1.5	Pr: 1 Cl: 2	1.5	1	1

An Ethnic Security Dilemma in Africa?

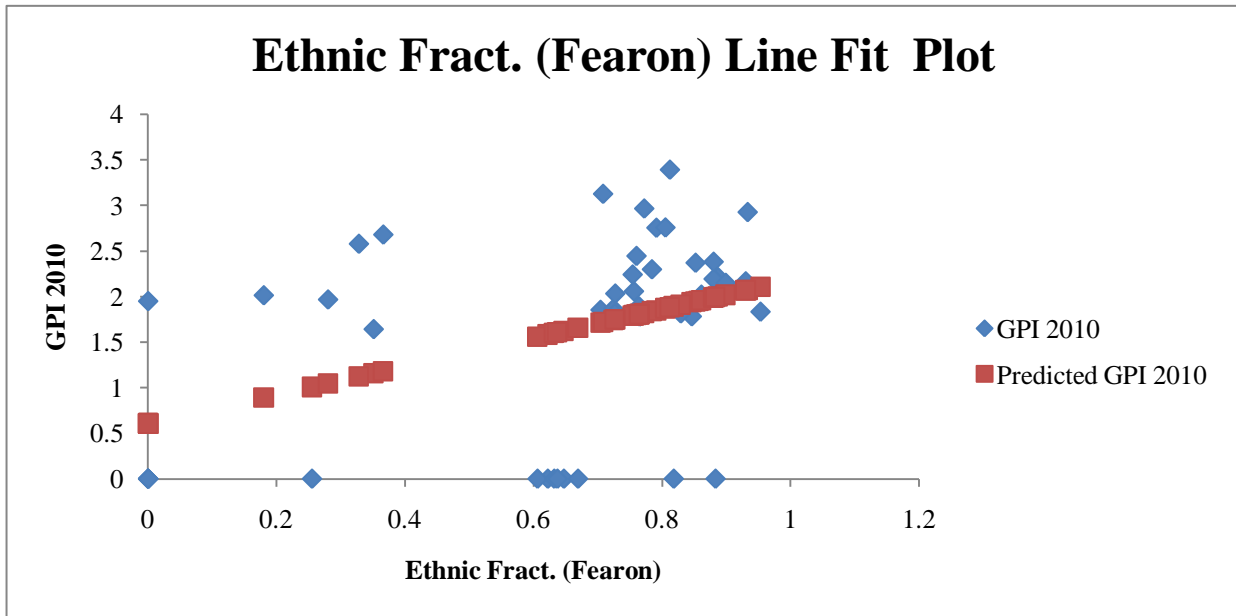
Cassidy M. Evans

	2			1		2
	Pr: 3 Cl:			Pr: 3 Cl:		Pr: 4 Cl:
6	4	3.5	Pr: 3 Cl: 4	3.5	4	3.5
	Pr: 2 Cl:			Pr: 2 Cl:		Pr: 2 Cl:
2.5	3	2.5	Pr: 2 Cl: 3	2.5	2	2
	Pr: 3 Cl:			Pr: 3 Cl:		Pr: 5 Cl:
5.5	5	4	Pr: 4 Cl: 4	4	3	4
	Pr: 7 Cl:			Pr: 4 Cl:		Pr: 4 Cl:
5	7	7	Pr: 4 Cl: 4	4	4	4
	Pr: 7 Cl:			Pr: 6 Cl:		Pr: 6 Cl:
6	6	6.5	Pr: 7 Cl: 6	5	5	5.5
	Pr: 1 Cl:			Pr: 2 Cl:		Pr: 2 Cl:
5	2	1.5	Pr: 1 Cl: 2	1.5	2	2
	Pr: 4 Cl:			Pr: 2 Cl:		Pr: 3 Cl:
3.5	5	4.5	Pr: 3 Cl: 4	3.5	3	2.5
	Pr: 3 Cl:			Pr: 3 Cl:		Pr: 3 Cl:
6	3	3	Pr: 3 Cl: 3	3	3	3
	Pr: 7 Cl:			Pr: 4 Cl:		Pr: 3 Cl:
5.5	6	6.5	Pr: 4 Cl: 5	4.5	3	3.5
	Pr: 7 Cl:			Pr: 6 Cl:		Pr: 7 Cl:
7	7	7	Pr: 6 Cl: 7	6.5	7	6.5
	Pr: 1 Cl:			Pr: 1 Cl:		Pr: 2 Cl:
5.5	2	1.5	Pr: 1 Cl: 2	1.5	2	1.5
	Pr: 7 Cl:			Pr: 7 Cl:		Pr: 7 Cl:
7	7	7	Pr: 7 Cl: 7	7	7	7
	Pr: 6 Cl:			Pr: 7 Cl:		Pr: 7 Cl:
5.5	5	5.5	Pr: 6 Cl: 5	5.5	5	6
	Pr: 5 Cl:			Pr: 4 Cl:		Pr: 3 Cl:
5.5	5	5	Pr: 4 Cl: 4	4	3	3.5
	Pr: 6 Cl:			Pr: 6 Cl:		Pr: 5 Cl:
6	5	5.5	Pr: 5 Cl: 5	5	5	5.5
	Pr: 5 Cl:			Pr: 5 Cl:		Pr: 5 Cl:
5.5	4	4.5	Pr: 6 Cl: 5	5.5	4	4.5
	Pr: 3 Cl:			Pr: 4 Cl:		Pr: 3 Cl:
5.5	4	3.5	Pr: 5 Cl: 4	4.5	4	4
	Pr: 5 Cl:			Pr: 6 Cl:		Pr: 6 Cl:
5	5	5	Pr: 6 Cl: 5	5.5	6	6

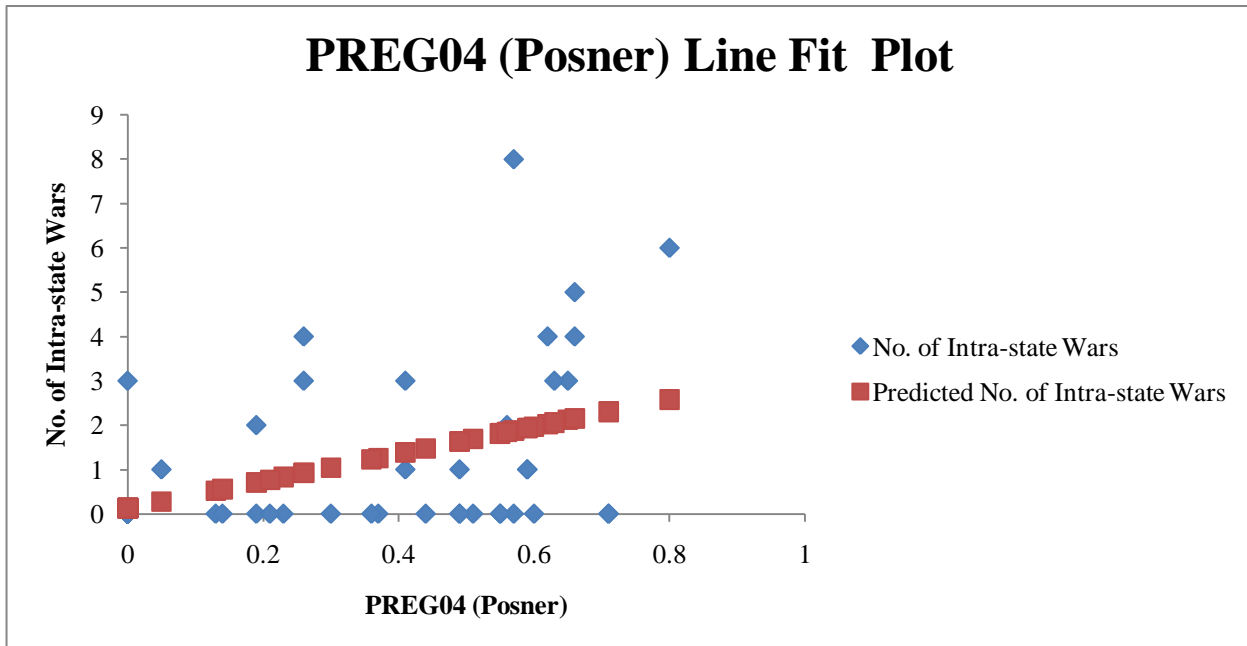
Average 2010	GPI 2010	GPI Rank (of 149)
5.5	2.057	86
2	NA	NA
2.5	1.641	33
4	1.852	57
5	2.577	131
6	2.21	106
1	NA	NA
5	2.753	136
6.5	2.964	141

3.5	NA	NA
5.5	2.192	102
6	2.925	140
6.5	2.297	118
5.5	NA	NA
7	1.948	69
7	NA	NA
6	2.444	127
5.5	1.981	74
5	1.89	63
1.5	1.781	48
5	NA	NA
4	NA	NA
3.5	2.369	120
3	NA	NA
3.5	2.148	99
5	2.019	77
3.5	1.813	51
2.5	2.24	109
1.5	NA	NA
3.5	1.779	47
2	1.864	59
4.5	NA	NA
4	2.756	137
6.5	2.012	75
2	NA	NA
3	2.031	79
3	NA	NA
3	1.818	53
7	3.39	148
2	2.38	121
7	3.125	146
6	1.966	73
3	1.832	55
4.5	NA	NA
4.5	2.165	100
3.5	1.813	51
6	2.678	135

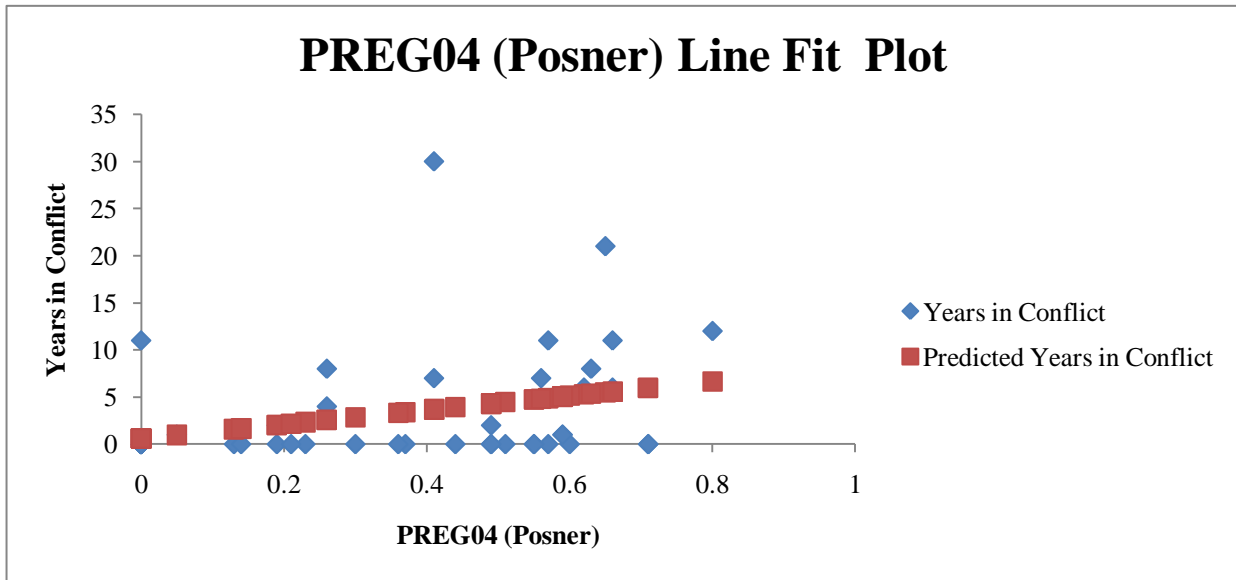
Appendix B



Appendix C



Appendix D



Appendix E

