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Ethnic Political Parties and Civil Conflict

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ETHNIC POLITICAL PARTIES AND CIVIL CONFLICT

A Thesis

Submitted to the Graduate Faculty of the
Louisiana State University and
Agricultural and Mechanical College
in partial fulfillment of the
requirements for the degree of
Master of Arts

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by
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ABSTRACT

The lack of consensus on the significance of ethnicity on civil conflict derives from the measures used, not from the concept's lack of merit. Current measures, such as the ethnolinguistic fractionalization index (ELF), examine differences in demographics rather than how the diversity becomes politically relevant or when the diversity leads to conflict. By using Horowitz's (1985) theory of ethnic voting and a measure for how closely a state's political parties are aligned with ethnic groups, one can better assess how countries' ethnic groups are politically organized and how this organization is associated with civil conflict. Using an original measure derived from Round 5 of the Afrobarometer indicating the extent to which a state's political parties are aligned ethnically and the UCDP/ PRIO's Armed Conflict Dataset, the following study finds that states with high levels of ethnic political parties are associated with an increased probability of civil conflict, while those states with a proportional legislative electoral system are associated with a decreased, though not statistically significant, probability of civil conflict.

INTRODUCTION

Recent research has concluded that certain physical conditions within a state, such as mineral wealth or terrain, are more influential on the onset of civil conflict than ethnic ties. Fearon and Laitin go so far as to state that “the factors that explain which countries have been at risk for civil war are not their ethnic or religious characteristics but rather the conditions that favor insurgency,” which they state to be poverty, terrain, political volatility, and population size (2003, 75). To test the effects of ethnicity on conflict, Fearon and Laitin use the ethno-linguistic fractionalization index (ELF),¹ a measure of the share of the largest ethnic group, the number of distinct languages spoken, and religious fractionalization. Using these demographic measures, they find no support for the theory and instead look to the “conditions that favor insurgency.”

While Fearon and Laitin (2003) do not find ethnicity to be a direct contributing factor in civil wars, they and Blimes (2006) see ethnicity as an indirect cause, as while ethnicity alone does not incite conflict, the social cohesion formed from common ethnicity can aid groups in overcoming the collective action problem (Gurr 1993; Tarrow 2011; Blimes 2006; Posen 1993; Fearon and Laitin 2003) when other factors are present that could lead to civil war. Ethnicity, then, instead of directly causing conflict “can provide natural cleavages on which society can fracture under stress” (Blimes 2006, 538).

Several factors associated with ethnicity help groups united under a common ethnic identity to overcome the collective action problem while other societal divisions fail to overcome such problems. First, in many African states individuals identify as closely or more closely with their ethnicity than with their national citizenship (Afrobarometer 2015). Second, ethnicity is

¹ ELF measures the probability that any two people randomly drawn from the same country would be from different ethnic groups. The closer the probability is to one, the more diverse the country and the greater the believed risk of civil war.

different from other societal cleavages in that defection from ethnic groups can be more difficult (Denny and Walter 2013) due to the view of a shared culture and common past (Horowitz 1985). This view of a common past increases social cohesion (Posen 1993; Blimes 2006), which leads to an increase in the ease of information sharing (Fearon and Laitin 1996; Habyarimana et al. 2009; Blattman and Miguel 2010; Gubler and Selway 2012), sanctioning (Horowitz 1985; Habyarimana et al. 2009, Blattman and Miguel 2010), and mobilization (Gurr 1993; Tarrow 2011; Blimes 2006; Posen 1993; Fearon and Laitin 2003). Ethnicity, then, within the opportunity/willingness framework (Most and Starr 1989) provides the opportunity for conflict but does not in and of itself provide the willingness to participate in conflict.

I argue that the willingness to act in civil conflict stems from the politicization of ethnicity and how this politicization affects vote choices. The combination of a low defection rate and a strong sense of group identity within a larger society provides ample opportunity for politicians to use ethnicity as a means to establish a power base. Common ethnicity in such states will link politicians to coethnic voters (Horowitz 1985), leading those politicians to allocate more material benefits to their coethnic constituents in the form of public goods, nepotism, and clientelism in exchange for continued political support (Cederman et al. 2010; Wucherpfennig et al. 2012). This politicization of ethnicity leads political parties within a state to be formed along ethnic lines.

According to Horowitz's (1985) theory of ethnic voting, when political parties form along ethnic lines, voting results tend to mirror the diversity within a state. In such states minority ethnic groups are therefore likely to be excluded from either wielding political power or gaining political representation. This exclusion from political power creates grievances within the society, increasing the probability of conflict. In summary, in states where political parties

form along ethnic lines, minority groups are unable to hold the government accountable and are therefore more likely to be disruptive to those in power.

Previous studies evaluating links between ethnicity and conflict focus on fractionalization measures to operationalize the concept of ethnicity and therefore only focus on the opportunity aspect within the opportunity/willingness framework (Most and Starr 1989). While these measures do demonstrate the level of diversity within a state (the opportunity for conflict), they do not indicate the degree to which communities within a given state align themselves politically along ethnic divisions excluding other groups from political power (the willingness for conflict). In other words, the presence alone of multiple ethnic groups does not ensure that such groups will have politically activated cleavages (Cox 1997). To evaluate politically active cleavages, one can examine the rate at which coethnics vote for the same political party. If the separation of political parties along ethnic divisions is high within a state, one can deduce that ethnic voting is occurring within that state. By evaluating whether political parties within a state are divided upon ethnic lines, one can test Horowitz's (1985) theory of ethnic voting and determine whether ethnicity plays a role in civil conflict.

Through this study, I will attempt to locate the causal mechanism linking ethnicity to civil conflict by evaluating whether or not political parties within African states form along ethnic lines and if such an association can be linked to civil conflicts in each country. To do so, I will use survey data from Round 5 of the Afrobarometer indicating the respondents' ethnic groups and political parties and civil conflict data from the UCDP/ PRIO Armed Conflict Dataset (2015).

REVIEW OF LITERATURE

Ethnicity and Collective Action

Benedict Anderson describes a nation as an “imagined community,” imagined because “the members of even the smallest nation will never know most of their fellow members, meet them, or even hear them, yet in the minds of each lives the image of their communion” (1983(2006), 6) and a community because of the deep comradeship based on a shared history. Nationalism is created based on this collective identity, and nationalism, within the defined borders of the state, creates the nation. What happens, though, when the majority of the citizens within a state do not identify with the other members or see a collective, shared past with all members of the state?

Figure 1 illustrates the degree to which respondents in the 34 African states included in Round 5 of the Afrobarometer identify with either their ethnic group or with their national

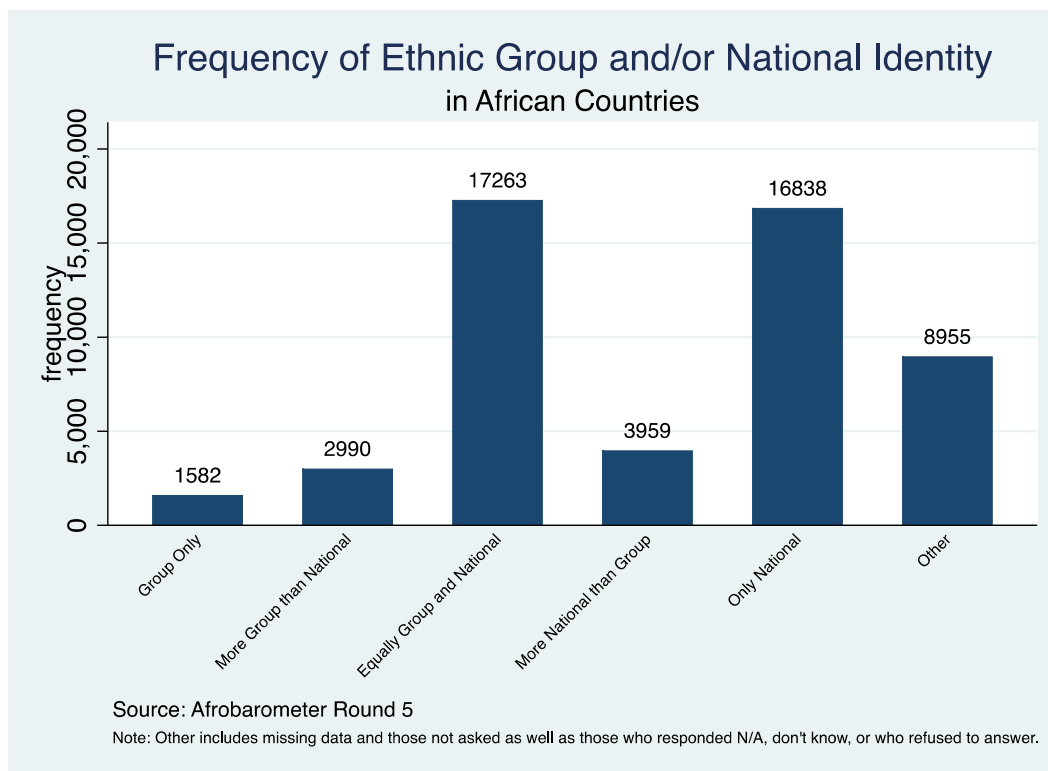


Figure 1: Frequency of Identification with Ethnic Group or National Identity

identity. While many citizens identify themselves either exclusively by their national identity or with a greater focus on their national identity than on their ethnic identity (20,797 respondents), ethnicity still plays a primary role in self-identification for the majority of the respondents (21,835 respondents). This lack of identifying strongly with a nation and instead identifying with an ethnic group can have political implications within a state.

Ethnicity, compared to other societal cleavages, can have a larger societal impact due to its unique properties. While ethnicity is a social construction and ethnic defections do occur (Kalyvas 2008), movement between ethnic groups is more difficult than movement between other social cleavages (Denny and Walter 2013). Group membership “is often marked by skin color, language, familial ties, or cultural heritage” (Gubler and Selway 2012, 210), and ethnic identity is seen as both being determined at birth and based on the beliefs of a collective past and a shared culture with other members of the group (Horowitz 1985; Cederman et al. 2010), organized on common religious, cultural, linguistic, racial, and/or class identities (Posner 2004a; Brancati 2006).

This view of a shared past creates dense social networks and social cohesion within ethnic groups that allow for ease of information sharing (Fearon and Laitin 1996; Habyarimana et al. 2009; Blattman and Miguel 2010; Gubler and Selway 2012), sanctioning (Horowitz 1985; Habyarimana et al. 2009, Blattman and Miguel 2010), and mobilization (Gurr 1993; Tarrow 2011; Blimes 2006; Posen 1993; Fearon and Laitin 2003), all of which help to overcome the collective action problem.

Habyarimana et al. (2009) conduct a series of experiments to determine the causal mechanisms for why diversity impedes collective action and why coethnics are better able to

overcome collective action problems. They find that technology mechanisms and strategy mechanisms provide ethnic groups with the means to work collectively.

The technology mechanisms include efficacy, where coethnics function together more efficiently; readability, where coethnics are able to gauge each other better than those from different ethnic groups; periodicity, where coethnics engage each other more frequently; and reachability, where coethnics are better able to find each other. In other words, “Ethnic groups are frequently marked by highly developed systems of social networks that allow for cheap and rapid transmission of information about individuals and their past histories” (Fearon and Laitin 1996, 718), while information about members of outgroups is low or lacking.

The strategy mechanism is that coethnics are more likely to impose sanctions and retaliate against those who fail to cooperate with a collective goal (Habyarimana et al. 2009). This ability to sanction decreases the probability of defection from collective action (Horowitz 1985; Fearon and Laitin 1996; Habyarimana et al. 2009).

The high levels of information on coethnics along with the applying of sanctions to those who defect from the group’s wishes both reduce the costs of mobilization. This decreased cost makes it easier to recruit members within an ethnic group to a particular political party or social movement.

Ethnicity, then, provides the opportunity for conflict through its ability to overcome the collective action problem. However, simply because ethnic groups are able to overcome the collective action problem through easy mobilization, information sharing, and sanctioning does not mean that people will engage in conflict or even identify more strongly with their ethnic group than with the state. While ethnic identities are determined at birth based on a view of a common history and shared culture with other members (Horowitz 1985), individuals make the

choice to identify with either their ethnic group or with the state (Penn 2008). Whichever group the individuals choose to identify with, they will demonstrate a bias towards that group, view a 'common fate' between members of the group, see the group as distinct from others (i.e., ingroup versus others), and compare the relative well-being of their ingroup to others (Penn 2008). The politicization of ethnicity can lead individuals to identify more strongly with their ethnic group than with the state.

Politicization of Ethnicity

As I discuss below more fully below, when members of an ethnically diverse state choose to identify with their ethnic groups over the state as a whole it can lead to collective grievances and the comparison of one's ingroup's well-being relative to other groups. These collective grievances provides the impetus for collective action in the form of creating political parties based on ethnicity, which in turn leads to the exclusion of segments of society from the political power. These grievances can then provide the willingness to engage in civil conflict.

Posner (2004b) illustrates the effects of the politicization of ethnicity through his natural experiment with the Chewa and Tumbuka peoples in Malawi and Zambia. His goal is to ascertain why ethnic differences matter within one state in social and political interactions and not the other.

While both states contain members of the two ethnic groups, the cultural differences between the groups alone are neither necessary nor sufficient conditions for conflict between the groups. If the differences were necessary or sufficient conditions, then the amount of conflict in the two states would be nearly equivalent. Instead, he finds that, while the same cleavages separate the two groups in both states, the differences are only politically salient in Malawi, not Zambia.

In Malawi, both ethnic groups represent large portions of the society and therefore “serve as viable bases for political coalition-building” (Posner 2004b, 529). By contrast, the same groups in Zambia are small and not useful for political mobilization.

Since the focus of politics in developing nations is in providing public goods to the state and resources are controlled by the national government, the group or coalition of groups that control the national government will receive more public goods provisions. Politicians who want to gain more support will draw upon cultural differences between groups, making the differences politically salient in order to garner more political support. He concludes, then, “that the political salience of a cultural cleavage depends not on the nature of the cleavage itself (since it is identical in both countries) but on the sizes of the groups it defines and whether or not they will be useful vehicles for political competition” (Posner 2004b, 529).

While the configuring of political parties or organizations along ethnic lines can include more people in the political process, it simultaneously creates political systems in which certain groups dominate politics and others are excluded from the process (Penn 2008). This domination of and exclusion from the political process is what can lead to conflict. How, though, do political parties and organizations come to be formed along ethnic lines, creating this division that increases the grievances against the state and excludes segments of society from the political process? The next section will evaluate the formation of ethnic political parties in Africa and how such formations lead to political exclusion.

THEORY: ETHNIC VOTING

Elections provide a means through which the people of a state are able to participate in government through the people's abilities to select the "good type" of politician who will support policies beneficial to the electorate (Przeworski et al. 1999) and to hold leaders accountable for their actions through the ability to sanction politicians by removing them from office (Davenport 2007), though this accountability is limited by the lack of clarity of responsibility (Przeworski et al. 1999). Elections in and of themselves, though, are not a sufficient means for the people to elect politicians who will maximize the welfare of all citizens. Politicians, before being able to enact promised beneficial policies, must first be elected to office. In order to be elected, political parties and politicians must raise funds and support from special interests and a base of supporters and also must provide the special interests and supporters with benefits for their support in return, (Przeworski et al. 1999) even if these benefits do not align with the best interests of the population as a whole. Electoral competition then becomes "the process by which parties exchange benefits (or promises thereof) derived from their control of political institutions for electoral support" (Strom 581). This exchange then gives parties votes needed and the people who voted for them benefits from policies enacted.

In states where strong ethnic loyalties are present, political parties tend to organize along ethnic lines (Horowitz 1985; Reynal-Querol 2002) because common ethnicity aids in linking the politicians to the citizens, thus providing the politicians with a power base to aid in their election to office. The presence of different ethnic groups within a society, though, does not automatically equal politically active cleavages. Politicians must politicize ethnicity for personal gain (i.e., winning office) for ethnic political parties to form (Posner 2004b; Cox 1997). In order to garner and to maintain support, then, politicians allocate material benefits to their coethnic

constituents in the form of public goods, nepotism, and clientelism (Cederman et al. 2010; Wucherpfennig et al. 2012). These benefits reinforce voting for candidates within one's ethnic group (Wantechekon 2003). Ethnic political parties, then, mean that politicians do not work to benefit diverse constituencies and are no longer held accountable by the society at large, but instead work for the benefit of and are accountable to their ethnic group alone.

The parties then work to garner maximum levels of support from their own ethnic groups in order to increase their power base as they cannot count on defectors from other political parties. This lack of crossover voters also means that, when one political party forms along ethnic lines, others will do so as well (Horowitz 1985). Competition then makes ethnic political parties move to extremes in order to acquire greater support, making it so that "the position of one party is the negation of the other" (Horowitz 1985, 348). Thus, when parties are based on ethnic identity, divisions between different groups are emphasized and exacerbated.

Ethnic political parties, supported through clientelism and the exaggeration of differences between ethnic groups, result in vote choices made outside of policy preferences. Voters, instead of voting for the party of their choice, must vote for the party aligned with their ethnic group regardless of the political position of the candidate (Horowitz 1985).

Horowitz's theory of ethnic voting illustrates how, through severe sanctioning of deviants, voter turnout in the midst of ethnic political parties is high (1985). The high turnout means that election results with ethnic political parties tend to mirror the diversity of the population. An election, then, "intended to be a vehicle of choice, was no such thing and will be no such thing in the future; it registered, not choice, but birth affiliation. There was no election—it was a census" (Horowitz 1985, 86). When an election occurs, the ethnic groups with the largest populations gain the majority of the votes and therefore political power, while smaller

groups gain the minority of the votes and are therefore excluded from political power. The smaller ethnic groups will not just see this as a one-time loss, because unless the population numbers drastically change, the elections will always result in such a manner. The smaller groups are therefore excluded from political power and will not see any present or future possibility of this changing within the current system. This exclusion from political power creates grievances leading the ethnic groups with smaller vote shares to see their only hope in gaining political power to be through the use of violence to change the societal makeup (Horowitz 1985).

Political exclusion therefore provides the motivation for civil conflict while the opportunity to act comes through the shared identities and common interests of the ethnic groups, which assist in bringing people together to overcome the collective action problem (Gurr 1993; Tarrow 2011; Blimes 2006; Posen 1993; Fearon and Laitin 2003). Political parties divided along ethnic lines, then, will increase the probability of civil conflict because social cohesion within the ethnic groups helps to overcome the collective action problem and vote choice based upon ethnicity makes political changes seem possible only through violence.

Therefore, one would expect that:

H₁: When political parties have successfully mobilized voters along ethnic divisions, the probability of civil conflict will increase.

While executives are generally elected through majoritarian systems, legislatures can be elected through either a proportional or a majoritarian system. A majoritarian system would continue to uphold Horowitz's (1985) ethnic voting theory that, if citizens vote along ethnic lines the ethnic majority will always win political power in the legislature, therefore excluding large segments of society from political power. If the system were proportional, ethnic voting would

create diversity within the legislature that would mirror the diversity of the entire state. Ethnic groups would not be excluded from political power, thus reducing the probability of civil conflict.

Therefore, one would expect that:

H₂: When the legislature is elected through a proportional system, as opposed to a majoritarian or mixed system, the probability of civil conflict even in the presence of ethnic political parties will decrease.

EXTANT MEASURES

Extant measures of diversity are insufficient for testing hypotheses on the effects of ethnicity on civil conflict because they generally focus on demographics rather than upon political party formations. The most commonly used measure for diversity, the ethno-linguistic fractionalization index (ELF) (Easterly and Levine 1997), uses a Herfindahl index to calculate the probability that any two people randomly drawn from the same state would be from different ethnic groups. The closer the probability is to one, the more diverse the state. Using this measure alone (Collier and Hoeffler 1998, DeSoysa 2002) or in combination with other measures (Fearon and Laitin 2003,² Collier and Hoeffler 2004³), studies find the correlation between ethnic diversity and civil war to be spurious when one controls for other variables.

Several additional measures have been constructed to test diversity, but due to the complicated nature of ethnicity, these measures also generally fail to identify salient divisions. Two main issues complicate the understanding of ethnic groups in relation to how they affect political affiliation and, therefore, civil conflict: correctly categorizing the identities of and relationships between groups and identifying the nature and strength of divisive social cleavages.

The first issue stems from the fact that many ethnic groups have subsets within the larger group, meaning that several groups identified as separate by a particular measure might actually view themselves as part of a larger whole of related peoples. Conversely, sometimes two smaller groups can be inappropriately classified together within a larger group. Under ELF, the Hutus and Tutsis of Rwanda were classified as one group, but were not aligned with one another

² Fearon and Laitin (2003) use a measure of the share of the largest ethnic group, the number of distinct languages spoken, and a measure of religious fractionalization in addition to ELF.

³ Collier and Hoeffler (2004) use a measure of social fractionalization as well as a measure of ethnic dominance, defined as existing when the largest ethnic group consists of 45-90% of the state's total population.

politically. To address this issue, Roeder (2001) creates an index in which he divides ethnic groups along different possible subsets, creating three different lists of groups, removing some of the coding errors of ELF, and allowing researchers to look at the different classifications of groups. However, his measure still fails to identify the relationships between groups (whether they are positive or not), the cleavages between them, and the strengths of those cleavages, meaning that it too is not useful for predicting civil conflict.

The second issue is that ethnic groups might be divided along different social cleavages in different states, making a cross-national analysis using one cleavage inappropriate for all states. While Alesina et al. (2003) create measures for ethnic, religious, and linguistic fractionalization, they fail to identify along which line each state does or does not have a fracture. Building from this concept, Fearon (2003) focuses on structural differences between the languages of different ethnic and religious groups, attempting to show cultural distance between groups by showing how the structures of the languages differ within a state.⁴ This measure, though, assumes that language is the major area of division among ethnic groups in all states, and this may not always be the case, again making cross-national analysis inaccurate. For example, while languages in the former Yugoslavian states are all structurally similar, the society fractured along religious and ethnic lines during their civil conflict. A cross-national study using linguistic structural differences would, therefore, incorrectly predict the occurrence of civil conflict in the former Yugoslavian states.

Posner (2004a) recognizes these two issues and seeks to create a measure based on the political activity of different ethnic groups within a state, specifically the African states. He

⁴ Fearon's (2003) measure identifies the probability that two people randomly drawn from the same state would speak similar languages. The probability will be close to 1 if the languages are structurally similar and close to 0 if they are dissimilar.

researches the ethnic groups considered politically relevant within states, defined as groups mentioned in relation to politics in books, newspaper articles, and academic journals. He then creates a Herfindahl concentration formula to show the proportion of what he deems politically relevant ethnic groups (PREG) within a society. Some groups, though, may be excluded from his measure specifically because they are excluded from political participation. As this exclusion from participation may be a direct cause of conflict, such as with the Tuareg in Mali, further exclusion from the measure would be inappropriate when examining the relationships between ethnicity, politics, and civil war.

Cederman and Girardin (2007) and Minorities at Risk (Asal et al. 2008) both add aspects to evaluate political exclusion. In Cederman and Girardin's ethno-nationalist exclusion index (N^*), they define each ethnic group in a state either as the ethnic group in power (EGIP) or as a marginalized ethnic group (MEG), meaning a group excluded from political power. Using their N^* measure, they find violence more likely when the EGIP is from a minority group. Fearon et al. (2007), though, point out that an ethnic minority was the EGIP in only four of the 88 states investigated, meaning that, if only one state was recoded, the results would lose statistical significance.

Minorities at Risk, by contrast, evaluates the political situation in 117 states and follows 282⁵ politically active ethnic groups with populations greater than 500,000.⁶ Only groups considered as being 'at risk' are included, though. For example, Bulgaria has three main ethnic

⁵ While the website states 284, the codebook includes 282 groups.

⁶ The criteria for groups to be considered 'at risk' are: that groups' memberships are determined by members and nonmembers; that a sense of importance is associated with group membership; that cultural features, such as customs, religion, or language, are shared among group members; that the cultural features must be practiced by a majority of group members; and that the group must represent either one-percent of the population or 100,000 people, whichever is lesser.

groups, the Bulgarians, the Roma, and the Turks. Only the Roma and the Turks are included in the dataset since only they are considered 'at risk,' while Bulgarians are excluded. This classification makes analysis of conflict difficult, as aspects of the dependent variable are included in the setup of the dataset, creating bias.

DATA AND MEASUREMENTS

What is needed in order to locate the causal mechanism linking ethnic diversity to civil conflict is a measure that captures both the political relevance and the political exclusion of ethnic groups within a state. Whether or not political parties are formed along ethnic divisions is one way to address this concern. In order to avoid the complications other measures have encountered with defining ethnic groups within a state, survey data can be used in which respondents self-identify both ethnicity and political party preference. The Afrobarometer includes questions for both in Rounds 3, 4, and 5. For this purposes of this paper, though, I will use the metric created for Round 5 due to the inclusion of 27 countries compared to 16 and 19 countries for Rounds 3 and 4, respectively. Checks for time-invariance of the measure are discussed below. The dataset is structured with the country-year as the unit of analysis, with 378 total observations for the 27 countries over the fourteen years from 2000 to 2013.

Independent Variables

In order to measure the degree to which political parties in African states form along ethnic lines, I created a measure using two questions asked in the Afrobarometer: “What is your ethnic community, cultural group, or tribe?” and “Do you feel close to any particular political party? Which party is that?” A cross-tabulation of these two questions indicates the amount of people in each ethnic group who feel close to each political party. The Afrobarometer allows respondents to self-identify political party and ethnicity rather than choosing from a prepared list of ethnic groups and parties in the state. The result is that some parties only had one to a few respondents identifying membership. To avoid such parties skewing the results, any party not receiving at least five-percent of the vote from any ethnic group was removed from the dataset.

Respondents who identified party choice as other, not applicable, or do not know and those who were not asked or those with missing data were also removed from the dataset.

From here, I generated the Herfindahl concentration formula: $H(Group) = (\sum_{i=1}^n s_i^2) (p_i)$, where s_i^2 is the share of ethnic group i in each political party, and p_i is the proportion of the ethnic group to the total sample population from the state. This measure demonstrates the probability that any two people randomly drawn from one ethnic group would be from the same political party, weighted for the size of the ethnic group. Numbers close to 1 indicate a high probability of two co-ethnics belonging to the same political party and numbers close to 0 indicate a low probability of such. While $H(Group)$ does indicate whether or not members of the same ethnic group vote along similar lines, it does not yet show whether or not political parties are formed along ethnic lines, since several ethnic groups could all vote for the same political party. In order to capture the concept of the degree to which other ethnic groups vote for the same political party, I also generated the Herfindahl concentration formula to show the probability that two people randomly drawn from the same political party would be from the same ethnic group, weighted for the size of the political party. That formula is: $H(Party) = (\sum_{i=1}^n s_i^2) (p_i)$, where s_i^2 is the share of political party i in each ethnic group, and p_i is the proportion of the political party to the total sample population from the state. $H(Group)$ and $H(Party)$ are then interacted with each other to create a country score for each state. Numbers close to 1 indicate a high probability of two people from the same political party being co-ethnics while numbers close to 0 indicate a low probability of such. The resulting variable, *EthnicParty*, is a continuous measure ranging from 0 to 1, with higher values indicating greater levels of ethnic voting. For an example metric, see Appendix Table 9. Table 1 lists the ethnic party score for each country. While the measure has the capacity to run from 0 to 1, all of the

Table 1: Ethnic Party Score by Country	
Country	Ethnic Party Score
Benin	0.1605170
Botswana	0.0520464
Burkina Faso	0.1623485
Burundi	0.6642144
Cameroon	0.0945853
Côte d'Ivoire	0.5151948
Ghana	0.2350929
Guinea	0.3597646
Kenya	0.1492057
Lesotho	0.0451729
Liberia	0.0710765
Madagascar	0.0738843
Malawi	0.1151922
Mali	0.0536527
Mauritius	0.3188097
Mozambique	0.1201208
Namibia	0.2903441
Niger	0.1595229
Nigeria	0.1310653
Senegal	0.1161529
Sierra Leone	0.2800359
South Africa	0.1369537
Tanzania	0.0287226
Togo	0.1142364
Uganda	0.0589902
Zambia	0.1070491
Zimbabwe	0.0812928

African states included in the dataset range from 0.029 (Tanzania) to 0.664 (Burundi). To achieve a score of 1, all members of an ethnic group would need to vote for only one political party and no member of a different group would vote for that party. These qualifications would need to hold true for all political parties within a state. The lack of the measure reaching 1 does not indicate that ethnicity does not play a role in political party formation but rather that no African state included in the dataset has all of its political parties formed solely on ethnic lines.

Table 2. Correlation Matrix Comparing Afrobarometer Metrics for Rounds 3, 4, and 5

	Round 3	Round 4	Round 5
Round 3	1.000		
Round 4	0.843	1.000	
Round 5	0.858	0.901	1.000

Round 5 Afrobarometer data for the years 2011 to 2013 is used to create the measure in the dataset. In order to demonstrate the time-invariance of the measure, I create the metric for Round 3 from the year 2005 and Round 4⁷ from 2008 to 2009 and compare the results between the three rounds in a correlation matrix, illustrated in Table 2. The high correlation throughout the time period indicates the time-invariance of the measure and the applicableness of using the Round 5 values for the timeframe under investigation. The dataset, then, covers the fourteen years from 2000 to 2013 for 27 states resulting in 378 possible observations with the country-year is the unit of analysis.

To test the second hypothesis that proportional legislative systems increase the probability of civil conflict, I use the variable *Proportional*. This variable is created from data compiled from the CIA World Factbook and from the Institute for Democracy and Electoral Assistance (1999). It is coded a 1 if the state uses a proportional system for electing the legislature and a 0 if the state uses a majoritarian or a mixed system in the given country-year.

Dependent Variable

The standard definition for civil conflict is greater than or equal to 25 battle-related deaths in one year due to an internal conflict, while for civil war the definition includes an internal conflict with more than 1,000 battle-related deaths in one year (Blattman and Miguel 2010). The UCDP/ PRIO Armed Conflict dataset includes measures for both, with a civil conflict

⁷ Rounds 1 and 2 did not ask the respondents to identify their ethnicity only their language, therefore these two rounds were not used.

being a minor-intensity conflict and a civil war being a major-intensity conflict. Here, *MinorInt* is a minor-intensity conflict, coded by the UCDP/PRIO Armed Conflict Dataset as 25 to 999 battle-related deaths in the given year for both internal armed conflicts between a state's government and at least one internal opposition group and for conflicts between a state's government and at least one internal opposition group with intervention from other states. A 1 indicates a minor-intensity conflict in the state in the given year whereas 0 indicates all others. Within the dataset, there are 44 instances of minor conflict, 12.22 percent of the observations. *MajorInt* is a major-intensity conflict or war, coded by the UCDP/PRIO Armed Conflict Dataset as over 1,000 battle-related deaths in the given year for both internal armed conflicts between a state's government and at least one internal opposition group and for conflicts between a state's government and at least one internal opposition group with intervention from other states. A 1 indicates a major-intensity conflict in the state in the given year whereas 0 indicates all others. There are only seven instances of major conflict or 2 percent of the observations. *MajorOrMinor* is coded 1 to indicate either a major or minor intensity conflict in the state in the given year, whereas 0 indicates all others. There are 51 instances of major or minor conflict or 18 percent of the observations. Each intensity level will be evaluated in the results section. With dichotomous dependent variables, I will be using logistic regression to test the hypothesis of an association between ethnic voting and an increased probability of civil conflict. Standard errors will be clustered by country.

Control Variables

In order to indicate that it is ethnic political parties, rather than mere ethnic fractionalization within a state, that contributes to civil conflict, the control variable *ELF* is included in the analysis, based on a Herfindahl concentration formula ($ELF = 1 - \sum_{i=1}^n s_i^2$,

where s_i^2 is the share of ethnic group i). It is a continuous measure ranging from 0 to 1 and measuring the probability that any two people randomly drawn from the same country would be from different ethno-linguistic groups. The closer the probability is to 1, the more diverse the country and the greater the believed risk of civil conflict. This measure is taken from Fearon and Laitin's 2003 replication dataset.

Strong states, whether democracies or authoritarian states, are less prone to civil war onset (Huntington 1968), while semi-democracies, countries that are neither fully autocratic nor democratic, are at a greater risk of civil conflict (Gurr 1993; Hegre et al. 2001; Gleditsch and Ruggeri 2010). The *Anocracy* variable controls for this effect and is derived from the Polity2 score for each country from the Polity IV Project's Political Regime Characteristics and Transitions dataset. The Polity2 score is computed by subtracting a state's autocracy score from its democracy score, resulting in a range from -10 for full autocracies to 10 for full democracies, where scores of -10 to -6 represent autocracies, scores of -5 to 5 represent anocracies, and scores of 6 to 10 represent democracies (Marshall, Jaggers, and Gurr 2011). *Anocracy*, then, is a dichotomous variable, with 1 indicating states with a Polity2 score between -5 and 5 and a 0 for all others. While strong states are less likely to encounter civil conflict whether democratic or authoritarian, democracies encounter a more stable and just domestic peace (Hegre et al. 2001), leading to the inclusion of the *Polity2* variable as a control as well. Here, one would expect higher values of the *Polity2* variable, indicating stabler democracies, to be correlated with a lower risk of civil conflict.

Primary commodity exports encourage rent-seeking behavior in rebels and increase the probability of civil war onset (Collier and Hoeffler 1998; Collier and Hoeffler 2004; DeSoysa 2002; Fearon and Laitin 2003; Fearon 2005; Ross 2012), with oil being the resource most

directly associated with civil war onset (Fearon and Laitin 2003; Ross 2012). Natural resources, especially oil, need only be extracted, not manufactured. As such, the industries employ only a small segment of society, if any at all, meaning that oil and natural resource production only directly benefits a few (Humphreys et al. 2007). The large influx of wealth from oil, coupled with the lack of transparency surrounding it, also helps encourage rent-seeking behavior by those in power (Humphreys et al. 2007). This wealth assists leaders in reducing tax rates on citizens and decreasing the bureaucracy needed to extract rents or taxes from the citizenry, making the government unaccountable to the people at large; allowing increased spending on the military, permitting the political leaders to maintain control; and concealing corruption from public scrutiny (Fearon and Laitin 2003; Humphreys et al. 2007; Ross 2012). Therefore, the higher the percentage of a state's GDP derived from oil and natural resource wealth, the less the government will be accountable to the people, the greater the rent-seeking behavior of those in power, and the more incentives that are presented to insurgents trying to win state power. Increased oil and natural resource exports, then, should be associated with an increased probability of civil conflict. *Oil* is measured as the state's total oil rents as a percentage of the state's GDP, and *NatRes* measures the total natural resource rents as a percentage of the state's GDP, both taken from the World Bank's World Development indicators.

Conflict is more likely in the face of an indivisible issue (Toft 2003; Fearon 1995). Land within a state can become an indivisible issue when a geographically concentrated ethnic group wants sovereignty over the area, especially if this area is seen as a homeland (Horowitz 1985; Toft 2003; Denny and Walter 2013) and the state does not see the territory as divisible (Toft 2003). When groups are dispersed across the country or live only in cities, land will not lead to an indivisible issue. The geographic concentration of ethnic groups also more easily allows

groups to overcome collective action problems (Toft 2003; Roessler 2011, Denny and Walter 2013). Therefore, if even one ethnic group is geographically concentrated, the probability of civil conflict should increase. The inclusion of the variable *Regional* controls for regionally based ethnic groups. A 1 indicates at least one ethnic group in a state being regionally based within the country-year, where regionally based is defined as living in a particular region that is “easily distinguishable on a map” (Vogt et al. 2014). A 0 indicates all other states. This variable is derived from the Ethnic Power Relations Settlement Patterns dataset.

Fearon and Laitin (2003) state that it is not ethnic diversity but rather the “conditions that favor insurgency,” namely population size, rough terrain, political instability, and poverty, that increase the probability of civil war onset. A large population increases the number of possible insurgents and decreases the state’s ability to follow the actions of individuals or groups within the state. As population increases, then, one would expect to observe an increase in the probability of civil conflict. The variable *LogPop* is the natural log of the population for each state by country-year, derived from the World Bank’s World Development indicators. The natural log of the variable is used due to the decreasing marginal effect of population as a state’s population increases (Fearon and Laitin 2003).

Similarly, rough terrain decreases the government’s ability to maintain accurate and timely intelligence on individuals and groups and provides safe locations for insurgents to hide from state agents (Fearon and Laitin 2003). The presence of rough terrain within a state should be associated with an increase in the probability that an insurgent group would rebel against a state government due to the protection that the terrain provides. *Mountain* is taken from Fearon and Laitin’s 2003 dataset and is the proportion of a country that is mountainous.

Political instability may “indicate disorganization and weakness and thus an opportunity for a separatist or center-seeking rebellion” (Fearon and Laitin 2003). Regime changes are more likely to cause political instability (Hegre et al. 2001; Fearon and Laitin 2003), thus one would expect to see a greater probability of civil conflict within a few years of a regime change.

Durable is taken from the Polity IV Project’s Political Regime Characteristics and Transitions dataset. This variable measures the number of years since the most recent regime change, defined as a 3-point change in the state’s *Polity* score in three years or less. A higher score indicates a state with lower instability, thus a lower expected probability of civil conflict.

Lastly, low GDP per capita is commonly associated with civil conflict, though the possibility of reverse causality, where conflict decreases the GDP per capita through the loss of life and decrease in living standards, remains (Blattman and Miguel 2010). Regardless, when the economy is bad, recruitment of insurgents becomes easier due to the lack of alternative income streams and the lowered ability of the government to police or to participate in counterinsurgency activities (Fearon and Laitin 2003). One would expect, then, that as individual incomes rise, the probability of civil conflict would decrease. Since there are diminishing marginal effects as the GDP increases, the natural log of the GDP per capita is more appropriate. *LogGDPpc* is the natural log of the GDP per capita for each country-year from the World Bank’s World Development indicators.

Tables containing descriptive statistics and a correlation matrix with all independent and control variables can be found in the Appendix (Table 10 and Table 11). Due to the high collinearity between *Anocracy* and *Polity2* ($r = -0.803$) and because the *Anocracy* variable more closely aligns with the theory under investigation, the *Polity2* variable is dropped from the empirical analysis.

EMPIRICAL RESULTS

Models 1 through 8 in Tables 3 and 4 display the results of the logistic regression analyses for the tests of the first hypothesis on the effects of ethnic political parties on civil conflict. Models 1 through 4 evaluate minor intensity conflicts while Models 5 through 8 evaluate major or minor intensity conflicts combined. Due to the high value of the constant in

Table 3: Logistic Regression: Effects of Ethnic Parties on Minor Intensity Civil Conflict

	Minor Intensity (1)	Minor Intensity with Centered Continuous Variables (2)	Minor Intensity Without Outliers (3)	Minor Intensity Without Outliers with Centered Continuous Variables (4)
<i>EthnicParty</i>	2.845 (1.784)	2.846 (1.784)	2.638 (1.863)	2.638 (1.863)
<i>ELF</i>	3.914* (2.364)	3.914* (2.364)	4.125* (2.412)	4.125* (2.411)
<i>Anocracy</i>	-0.031 (0.704)	-0.031 (0.704)	-0.045 (0.745)	-0.045 (0.745)
<i>Oil</i>	-0.102 (0.081)	-0.102 (0.081)	-0.112 (0.085)	-0.112 (0.085)
<i>NatRes</i>	0.058 (0.040)	0.058 (0.040)	0.068 (0.044)	0.068 (0.044)
<i>Regional</i>	-0.930 (1.323)	-0.930 (1.323)	-0.934 (1.333)	-0.934 (1.333)
<i>LogPop</i>	1.008 (0.673)	1.008 (0.673)	1.009 (0.678)	1.009 (0.679)
<i>Mountain</i>	0.001 (0.023)	0.001 (0.023)	-0.001 (0.024)	-0.001 (0.024)
<i>Durable</i>	-0.061 (0.063)	-0.061 (0.063)	-0.066 (0.064)	-0.066 (0.064)
<i>LogGDPpc</i>	-0.690* (0.379)	-0.690* (0.379)	-0.670* (0.387)	-0.671* (0.387)
<i>Constant</i>	-17.127 (11.183)	-1.590 (1.264)	-17.445 (11.388)	-1.581 (1.296)
<i>Observations</i>	360	360	358	358
<i>Pseudo R2</i>	0.168	0.168	0.169	0.169

Notes: Entries are coefficients from a logistic regression; robust standard errors are in parentheses; Models 2 and 4 use centered non-discrete continuous variables.

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$ (one-tailed tests)

Table 4: Logistic Regression: Effects of Ethnic Parties on Major or Minor Intensity Conflict

	Major or Minor Intensity (5)	Major or Minor Intensity with Centered Continuous Variables (6)	Major or Minor Intensity Without Outliers (7)	Major or Minor Without Outliers with Centered Continuous Variables (8)
<i>EthnicParty</i>	2.799* (1.564)	2.799* (1.564)	2.851* (1.565)	2.851* (1.565)
<i>ELF</i>	3.624 (2.531)	3.624 (2.531)	3.739 (2.522)	3.739 (2.522)
<i>Anocracy</i>	0.418 (0.812)	0.418 (0.812)	0.332 (0.808)	0.332 (0.808)
<i>Oil</i>	-0.114 (0.081)	-0.114 (0.081)	-0.106 (0.087)	-0.106 (0.087)
<i>NatRes</i>	0.070* (0.038)	0.070* (0.038)	0.063 (0.043)	0.063 (0.043)
<i>Regional</i>	-0.812 (1.332)	-0.812 (1.332)	-0.837 (1.323)	-0.837 (1.323)
<i>LogPop</i>	1.039 (0.682)	1.039 (0.682)	1.022 (0.695)	1.022 (0.695)
<i>Mountain</i>	0.012 (0.024)	0.012 (0.024)	0.010 (0.025)	0.010 (0.025)
<i>Durable</i>	-0.053 (0.054)	-0.053 (0.054)	-0.048 (0.054)	-0.048 (0.054)
<i>LogGDPpc</i>	-0.715 (0.459)	-0.715 (0.459)	-0.736* (0.447)	-0.736* (0.447)
<i>Constant</i>	-17.806 (11.469)	-1.902 (1.320)	-17.356 (11.721)	-1.858 (1.310)
<i>Observations</i>	360	360	357	357
<i>Pseudo R2</i>	0.212	0.212	0.185	0.185

Notes: Entries are coefficients from a logistic regression; robust standard errors are in parentheses; Models 6 and 8 use centered non-discrete continuous variables.

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$ (one-tailed tests)

Models 1 and 5, Models 2 and 6 rerun the same analyses but with centered continuous non-discrete explanatory and control variables. Centering the variables in all models reduces the amount of the constant's coefficient but does not alter the strength or directionality of any other

variable. Models 3 and 7 drop potential outliers⁸ and Models 4 and 8 assess the models without outliers with centered non-discrete continuous variables. Again, the centered variables only have an effect on the coefficient of the constants, not on the coefficients of the explanatory and control variables. When evaluating only minor intensity conflicts, the *EthnicParty* variable's coefficient, while not statistically significant ($p = 0.056$), is in the anticipated direction. When major conflicts are incorporated into the analysis as well, the variable reaches statistical significance ($p = 0.037$) in the hypothesized direction.

Since there are only seven cases of major intensity conflict in the dataset, each occurring when the state is an anocracy, a logistic regression evaluating major intensity conflicts alone results in perfect prediction. Anocracy is then automatically omitted from the model due to collinearity, which causes all but 176 observations to be dropped. Out of the observations remaining, none represent major intensity conflict. Due to the lack of variance of the dependent variable, all independent and control variables become statistically insignificant except for natural resources as a percent of GDP, which remains significant ($p < 0.05$, one-tailed test). Therefore, no model presented evaluates major conflicts alone. Rather Models 5 through 8 evaluate the combination of major and minor conflicts.

Table 5 illustrates the predicted probability of conflict for a one-standard deviation difference in continuous variables and a one-unit difference in binary variables. A one-standard deviation increase in ethnic political parties within a state results in a 4.3 percent increase in the probability of minor intensity conflict and a 4.4 percent increase in the probability of a major or minor intensity conflict. Ethnic fractionalization has a more drastic, though not statistically significant, effect on the probability of conflict. A one-standard deviation increase in ethno-

⁸ Graphs for potential outliers in these two models can be found in Appendix Figures 4 and 5.

Table 5: Predicted Probability of Conflict		
Variable	Minor Intensity	Major or Minor Intensity
<i>EthnicParty</i>	0.043* (0.026)	0.044* (0.023)
<i>ELF</i>	0.104 (0.073)	0.098 (0.076)
<i>Anocracy</i>	-0.003 (0.065)	0.040 (0.073)
<i>Oil</i>	-0.046 (0.034)	-0.055 (0.037)
<i>NatRes</i>	0.061 (0.047)	0.078* (0.047)
<i>Regional</i>	-0.103 (0.171)	-0.092 (0.171)
<i>LogPop</i>	0.133 (0.107)	0.140 (0.106)
<i>Mountain</i>	0.002 (0.045)	0.025 (0.055)
<i>Durable</i>	-0.047 (0.043)	-0.045 (0.041)
<i>LogGDPpc</i>	-0.052* (0.023)	-0.059* (0.032)
<p><i>Notes:</i> Entries are differences in predicted probabilities for a one-standard deviation difference in continuous variables and a one-unit difference in binary variables; standard errors are in parentheses.</p> <p>* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$ (one-tailed tests)</p>		

linguistic fractionalization within a state results in a 10.4 percent increase in the probability of minor intensity conflict and a 9.8 percent increase in the probability of major or minor intensity conflict. Out of the ‘conditions that favor insurgency,’ only the GDP per capita indicates a statistically significant change in the predicted probability of conflict, with a 5.2 percent decrease in minor conflicts and a 5.9 percent decrease in major or minor conflicts as the state’s GDP per capita increases. These results provide strong support for hypothesis 1, indicating that an increase in ethnic political parties within the 27 states in the dataset is associated with an increased probability of conflict. Within these states, ethnic political parties provide a stronger explanation for the probability of conflict than do the ‘conditions that favor insurgency.’

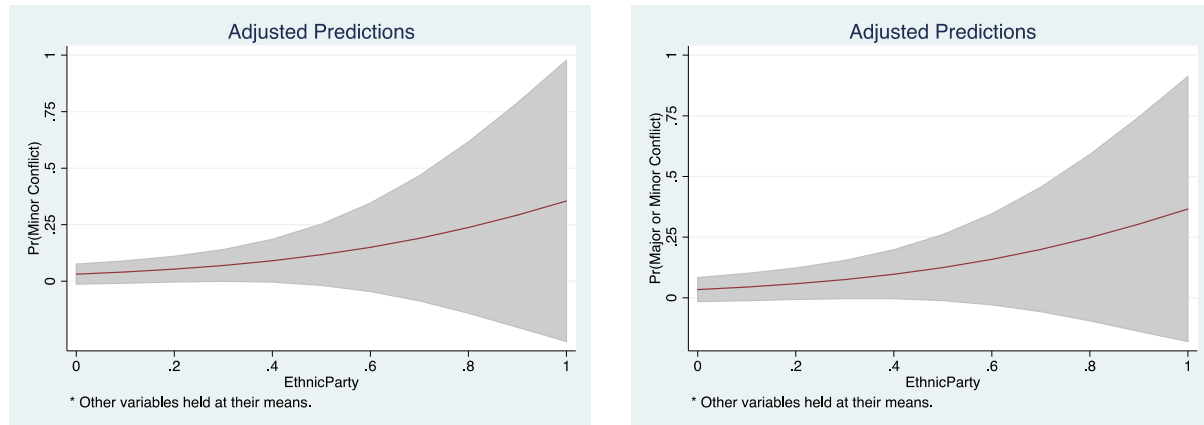


Figure 2: Comparison of the Predicted Probability of Minor Intensity Conflict to Major or Minor Intensity Conflict across Different Values of Ethnic Political Parties

Figure 2 provides an illustration of the relationship between ethnic political parties and the predicted probability of conflict with all other variables held at their means. While similar in shape and confidence intervals, the probability of conflict increases slightly more rapidly for major or minor conflicts as ethnic parties increase than it does for minor intensity conflicts only.

While an interaction would be more appropriate to test the effects of ethnic political parties in states with proportional or majoritarian legislative systems on conflict as the effects of proportional systems may vary across different levels of ethnic political parties, the current data are insufficient to test such a relationship. Instead, I include *Proportional* as an explanatory variable in Models 9 through 16 in Tables 6 and 7 and then evaluate the relationship of ethnic political parties to conflict across the two different values of the *Proportional* variable. Table 6 focuses on minor intensity conflict while Table 7 evaluates the effects of ethnic political parties and proportional systems on major and minor intensity conflicts. Again, due to the low amount of observations for major intensity conflicts, an independent analysis of these conflicts is not possible. These seven observations are therefore grouped with minor intensity conflicts for the analyses in Table 7.

Table 6: Logistic Regression: Effects of Ethnic Parties on Minor Intensity Conflict Controlling for Proportional Legislative Electoral Systems

	Minor Intensity (9)	Minor Intensity with Centered Continuous Variables (10)	Minor Intensity Without Outlier (11)	Minor Intensity Without Outlier with Centered Continuous Variables (12)
<i>EthnicParty</i>	3.056* (1.656)	3.056* (1.656)	2.842* (1.699)	2.842* (1.699)
<i>Proportional</i>	-0.844 (0.694)	-0.844 (0.694)	-0.849 (0.720)	-0.849 (0.720)
<i>ELF</i>	3.360 (2.176)	3.360 (2.176)	3.410 (2.211)	3.410 (2.211)
<i>Anocracy</i>	-0.004 (0.710)	-0.004 (0.710)	0.033 (0.728)	0.033 (0.728)
<i>Oil</i>	-0.111 (0.083)	-0.111 (0.083)	-0.125 (0.086)	-0.125 (0.086)
<i>NatRes</i>	0.059 (0.040)	0.059 (0.040)	0.073* (0.043)	0.073* (0.043)
<i>Regional</i>	-1.403 (1.231)	-1.403 (1.231)	-1.397 (1.250)	-1.397 (1.250)
<i>LogPop</i>	1.088 (0.693)	1.088 (0.693)	1.111 (0.698)	1.111 (0.698)
<i>Mountain</i>	-0.003 (0.024)	-0.003 (0.024)	-0.004 (0.024)	-0.004 (0.024)
<i>Durable</i>	-0.047 (0.061)	-0.047 (0.061)	-0.054 (0.063)	-0.054 (0.063)
<i>LogGDPpc</i>	-0.720* (0.371)	-0.720* (0.371)	-0.693* (0.380)	-0.693* (0.380)
<i>Constant</i>	-17.366 (11.183)	-1.120 (1.188)	-18.050 (11.326)	-1.130 (1.223)
<i>Observations</i>	360	360	359	359
<i>Pseudo R2</i>	0.175	0.175	0.185	0.185

Notes: Entries are coefficients from a logistic regression; robust standard errors are in parentheses; Models 10 and 12 use centered non-discrete continuous variables.

* p < 0.05, ** p < 0.01, *** p < 0.001 (one-tailed tests)

Models 9 and 13 evaluate the effects of ethnic political parties and proportional legislative electoral systems on conflict at minor and major or minor intensities, respectively. Models 10 and 14 rerun the analyses with centered non-discrete continuous variables due to the high

Table 7: Logistic Regression: Effects of Ethnic Parties on Major or Minor Intensity Conflict Controlling for Proportional Legislative Electoral Systems

	Major or Minor Intensity (13)	Major or Minor Intensity with Centered Continuous Variables (14)	Major or Minor Intensity Without Outlier (15)	Major or Minor Without Outlier with Centered Continuous Variables (16)
<i>EthnicParty</i>	3.115* (1.534)	3.115* (1.534)	3.115* (1.516)	3.115* (1.516)
<i>Proportional</i>	-0.891 (0.730)	-0.891 (0.730)	-0.915 (0.720)	-0.915 (0.720)
<i>ELF</i>	3.059 (2.293)	3.059 (2.293)	3.153 (2.277)	3.153 (2.277)
<i>Anocracy</i>	0.443 (0.800)	0.443 (0.800)	0.356 (0.798)	0.356 (0.798)
<i>Oil</i>	-0.122 (0.085)	-0.122 (0.085)	-0.115 (0.091)	-0.115 (0.091)
<i>NatRes</i>	0.071* (0.039)	0.071* (0.039)	0.063 (0.044)	0.063 (0.044)
<i>Regional</i>	-1.299 (1.242)	-1.299 (1.242)	-1.337 (1.226)	-1.337 (1.226)
<i>LogPop</i>	1.131 (0.719)	1.131 (0.719)	1.114 (0.730)	1.114 (0.730)
<i>Mountain</i>	0.007 (0.025)	0.007 (0.025)	0.005 (0.025)	0.005 (0.025)
<i>Durable</i>	-0.036 (0.055)	-0.036 (0.055)	-0.031 (0.054)	-0.031 (0.054)
<i>LogGDPpc</i>	-0.789* (0.474)	-0.789* (0.474)	-0.803* (0.462)	-0.803* (0.462)
<i>Constant</i>	-17.978 (11.550)	-1.452 (1.206)	-17.525 (11.801)	-1.386 (1.195)
<i>Observations</i>	360	360	357	357
<i>Pseudo R2</i>	0.220	0.220	0.194	0.194

Notes: Entries are coefficients from a logistic regression; robust standard errors are in parentheses; Models 14 and 16 use centered non-discrete continuous variables.

* p < 0.05, ** p < 0.01, *** p < 0.001 (one-tailed tests)

coefficients for the constants. The centered variables only reduce the coefficients for the constants; they do not affect the amplitude or directionality of the coefficients for the explanatory

and control variables. Models 11 and 15 remove possible outliers from the dataset,⁹ and Models 12 and 16 rerun the models without outliers with centered non-discrete continuous variables. The directionality and statistical significance for the main explanatory variables hold throughout the robustness checks. While ethnic political parties remain positive and statistically significant ($p < 0.05$) throughout the models, indicating that ethnic political parties increase the logged odds of conflict, the *Proportional* variable is negative and fails to achieve statistical significance. This preliminary analysis indicates that the presence of proportional legislative electoral systems reduce the logged odds of conflict, though not by a statistically significant amount.

Table 8 provides a clearer picture of the effect of the explanatory variables on conflict by illustrating how each variable affects the predicted probability of conflict. For both minor and major or minor intensity conflicts, ethnic political parties increase the predicted probabilities of conflict. Ethnic political parties increase the probability by 4.6 percentage points for a minor intensity conflict and 4.9 percentage points for a major or minor intensity conflict, only slightly higher than the analyses without the *Proportional* variable. Based on this analysis, proportional legislative electoral systems reduce the probability of minor intensity conflicts by 6.8 percent and major or minor intensity conflicts by 7.6 percent, though neither reduction is statistically significant. Again, the only variable associated with the ‘conditions that favor insurgency’ that has a statistically significant effect on the predicted probability of conflict is the GDP per capita, which decreases the probability of minor intensity conflict by 5.4 percentage points and the probability of major or minor intensity conflicts by 6.3 percentage points. These results indicate that proportional legislative electoral systems may reduce the probability of conflict, providing weak support for hypothesis 2.

⁹ Graphs for potential outliers in these two models can be found in Appendix Figures 6 and 7.

Table 8: Predicted Probability of Conflict Controlling for Proportional Legislative Electoral Systems

Variable	Minor Intensity	Major or Minor Intensity
<i>EthnicParty</i>	0.046* (0.025)	0.049* (0.024)
<i>Proportional</i>	-0.068 (0.053)	-0.076 (0.059)
<i>ELF</i>	0.086 (0.064)	0.080 (0.066)
<i>Anocracy</i>	-0.000 (0.064)	0.042 (0.071)
<i>Oil</i>	-0.049 (0.034)	-0.058 (0.037)
<i>NatRes</i>	0.062 (0.047)	0.078 (0.047)
<i>Regional</i>	-0.164 (0.170)	-0.154 (0.167)
<i>LogPop</i>	0.144 (0.110)	0.152 (0.110)
<i>Mountain</i>	-0.006 (0.043)	0.014 (0.053)
<i>Durable</i>	-0.037 (0.043)	-0.032 (0.045)
<i>LogGDPpc</i>	-0.054** (0.022)	-0.063* (0.031)

Notes: Entries are differences in predicted probabilities for a one-standard deviation difference in continuous variables and a one-unit difference in binary variables; standard errors are in parentheses.

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$ (one-tailed tests)

Figure 3 supports these findings. In this figure, one can see that the effects of ethnic political parties on conflict do indeed vary between proportional systems and non-proportional (majoritarian and mixed) systems, where those states with proportional legislative electoral systems have a lower probability of conflict than those states without a proportional system.

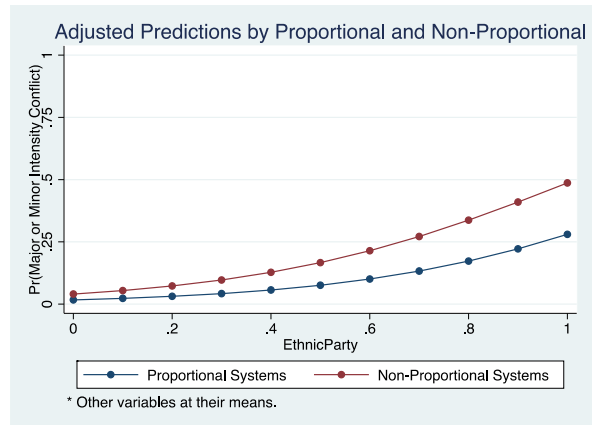
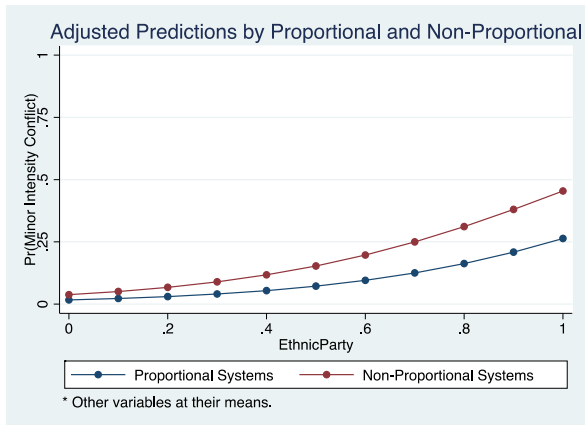


Figure 3: Probability of Conflict in Proportional and Non-Proportional Legislative Electoral Systems

CASE STUDY

The results of the statistical analysis indicate a clear association between ethnic political parties and an increase in civil conflict for the years 2000 to 2013. Data for previous years are not available since the data are derived from the Afrobarometer, which only began surveying in 1999. In order to test the first hypothesis for this study before the year 2000, I will conduct two case studies: one in Mali and another in Nigeria. These two states were chosen due to their high levels of ethnic diversity and their history of civil wars attributed to ethnic conflict.

Mali had an ethnic civil war from 1989 to 1994 in which the rebels sought autonomy. For the time period of 1945 to 1999, its ELF score was .7783, indicating high fractionalization along ethnic lines. Nigeria also had an ethnic civil war (1967 to 1970) in which the opposition forces sought autonomy. The ELF score in Nigeria is .8629, also indicating high ethnic diversity (Fearon and Laitin 2003).

The measure described in the previous statistical section indicates that political party choice is presently more defined by ethnic groups in Nigeria (0.1310653) than in Mali (0.0536527), providing initial support to the hypothesis that ethnically based political parties contribute to civil war onset in Nigeria but challenging the idea that such parties led to fighting in Mali. A historical examination of the two states supports the assumptions provided by the measure, but, while Mali's civil wars are still focused on political exclusion, it is the political exclusion of one ethnic group while other ethnic groups are more politically intertwined.

Mali

Mali is split by the Niger River, with about 90% of the population located south of the river and the remaining 10% living in the northern area (Pringle 2006). Ethnic groups are split among the regions (Stewart 2013), with the Mande people (about half of the population) located

in the south, the Peul (roughly 17% of the population) in the Niger Delta, the Songhai (about 6% of the population) and the Seina (about 12% of the population) in the southeast, and the Tuareg (about 10% of the population) in the north (The World Factbook 2013).

While ethnically diverse and geographically divided, the norm in Mali tends towards interethnic tolerance (Stewart 2013). This norm is facilitated by a historical practice known as cousinage, or “joking relationships,” in which people from different ethnic groups and castes can share humorous insults with one another, even if strangers. Because it crosses ethnic lines, cousinage connects people of different ethnic backgrounds. Dunning and Harrison (2010) show that the practice of cousinage therefore makes one unable to predict vote choice in Mali based on ethnicity alone. Candidates in joking relationships with the voters tended to be evaluated as favorably or more favorably than candidates from the voters’ own ethnic groups. This practice of cousinage, then, promotes interethnic cooperation and voting amongst most ethnic groups in Mali and contributes to the low ethnic political party score there.

However, the rebel group participating in Mali’s civil wars, the Tuareg, do not participate in cousinage (Dunning and Harrison 2010). The exclusion of the Tuareg from this practice and their geographic isolation limits their interconnection with other ethnic groups and may contribute to their feelings of political, social, and economic marginalization, which is cited as the motivation behind their frequent separatist movements (Asal 2008).

Nigeria

Unlike political parties in Mali, parties in Nigeria have been based upon regional ethnic grouping since the state’s independence in 1960 (Ajayi 2015). Nigeria has an estimated 250 ethnic groups. The three principal ethnic groups are divided amongst three main provinces (the western, eastern, and northern regions), with the Hausa-Fulani in the north comprising roughly

29% of the population, the Igbo in the southeast comprising 21%, and the Yoruba in the southwest comprising 18% (The World Factbook 2013). Historically, each region has had political parties protecting the individual region's best interests, with the Action Group (AG) in the west, the Northern People's Congress (NPC) in the north, and the National Council for Nigeria and the Cameroons (NCNC) in the east (Ajayi 2015). Being of similar size, no one group gained a majority of the votes in the 1959 pre-independence national elections, though each won in their home districts. With no clear winner, the NCNC of the east and the NPC of the north formed a coalition, split national leadership, and excluded the AG from political power. This political exclusion contributed to the outbreak of the Nigerian civil war in 1967 (Ajayi 2015; Irukwa 2014).

DISCUSSION

For the 27 African states under analysis in this paper, party formation along ethnic divisions is associated with an increase in the probability of conflict. Proportional legislative electoral systems are associated with a decrease in civil conflicts, though the relationship was not statistically significant in any of the models run. Out of the “conditions that favor insurgency” (Fearon and Laitin 2003) only GDP per capita is consistently statistically significant throughout the models. While this dataset is relatively small, covering only 27 states from the years 2000 to 2013, the results from this study suggest the importance of studying the degree to which ethnic fractionalization defines the way in which a state’s government is formed. If ethnically homogenous political parties create more of a division within a society, then a focus should be placed on diversification within political parties in order to help reduce the probability of conflict.

With only 27 countries included in the dataset, I can conclude that, within these states, political parties formed along ethnic lines are associated with an increased probability of civil conflict. These findings, however, cannot be expanded on a larger scale or to a larger timeframe.

The African continent and surrounding islands include 53 independent states. While Round 5 of the Afrobarometer included 34 states, the questions of interest were only asked in 27. This means that 51 percent of the states in Africa are not represented in this study. This has larger implications if the states not included are all correlated in some way, especially if their exclusion is due to conflict within the states.

The results in this analysis, though, support further research being conducted on the link between ethnic political parties and civil conflict. In order to discuss the larger implications of ethnic political parties on civil conflict, one would need to construct a dataset incorporating more

countries from more regions and increase the time period under examination. The inclusion of political alliances and coalitions would also help to strengthen the arguments made. Conclusions from such a study could potentially be applicable when discussing the overall implications of ethnic political parties in Africa as a whole.

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APPENDIX

Table 9: Example Metric (Benin)

Raw Vote Counts from Cross Tabulation											
Group	Party										Total
	100	101	102	103	104	105	9995	9997	9998	9999	
1	20	8	1	0	0	0	0	161	0	0	190
10	74	67	3	1	4	0	1	349	3	1	503
27	19	0	0	0	0	0	0	19	0	0	38
34	52	16	3	0	0	0	1	98	0	0	170
102	60	0	2	0	0	1	1	47	0	0	111
103	38	0	5	3	0	0	2	24	0	0	72
105	33	0	5	0	0	0	0	22	0	0	60
107	17	0	2	0	0	0	0	11	0	0	30
108	4	0	0	0	0	0	0	1	0	0	5
109	4	0	0	0	0	0	0	2	0	0	6
110	3	0	0	0	0	0	0	3	0	0	6
9995	1	0	3	0	0	0	0	5	0	0	9
Total	325	91	24	4	4	1	5	742	3	1	1200

Edited Vote Counts (9000s and parties not receiving at least 5% of one group's vote removed)						
Group	Party				Total	Proportion of Group to Total
	100	101	102	103		
1	20	8	1	0	29	0.066
10	74	67	3	1	145	0.330
27	19	0	0	0	19	0.043
34	52	16	3	0	71	0.161
102	60	0	2	0	62	0.141
103	38	0	5	3	46	0.105
105	33	0	5	0	38	0.086
107	17	0	2	0	19	0.043
108	4	0	0	0	4	0.009
109	4	0	0	0	4	0.009
110	3	0	0	0	3	0.007
Total	324	91	21	4	440	
Proportion of Party to Total	0.736	0.207	0.048	0.009		

(Table 9 continued)

Share of the Political Party Within Each Ethnic Group (G)					
<u>Group</u>	<u>Party</u>				<u>Total</u>
	<u>100</u>	<u>101</u>	<u>102</u>	<u>103</u>	
1	0.690	0.276	0.034	0	1.000
10	0.510	0.462	0.021	0.007	1.000
27	1.000	0	0	0	1.000
34	0.732	0.225	0.042	0	1.000
102	0.968	0	0.032	0	1.000
103	0.826	0	0.109	0.065	1.000
105	0.868	0	0.132	0	1.000
107	0.895	0	0.105	0	1.000
108	1.000	0	0	0	1.000
109	1.000	0	0	0	1.000
110	1.000	0	0	0	1.000

Herfindahl (G): The Probability that Two Co-ethnics Support the Same Party		
<u>Group</u>	<u>H(G)</u>	<u>Weighted H(G)</u>
1	0.553	0.036
10	0.474	0.156
27	1.000	0.043
34	0.589	0.095
102	0.938	0.132
103	0.698	0.073
105	0.771	0.067
107	0.812	0.035
108	1.000	0.009
109	1.000	0.009
110	1.000	0.007
Total		0.663

Share of the Ethnic Group Within Each Political Party (P)				
<u>Group</u>	<u>Party</u>			
	<u>100</u>	<u>101</u>	<u>102</u>	<u>103</u>
1	0.062	0.088	0.048	0
10	0.228	0.736	0.143	0.250
27	0.059	0	0	0
34	0.160	0.176	0.143	0
102	0.185	0	0.095	0
103	0.117	0	0.238	0.750
105	0.102	0	0.238	0
107	0.052	0	0.095	0
108	0.012	0	0	0
109	0.012	0	0	0
110	0.009	0	0	0
Total	1.000	1.000	1.000	1.000

(Table 9 continued)

Herfindahl (P): Probability that Two People from the Same Party are from the Same Ethnic Group					
	<u>Party</u>				<u>Total</u>
	<u>100</u>	<u>101</u>	<u>102</u>	<u>103</u>	
H(P)	0.147	0.581	0.175	0.625	---
Weighted H(P)	0.108	0.120	0.008	0.006	0.242

Country Score = Weighted H(G) x Weighted H(P)

Country Score = $0.663 \times 0.242 = 0.160$

Table 10: Operational Definitions, Data Sources, and Descriptive Statistics			
Variable	Operational Definition	Data Source	Descriptive Statistics
<i>MinorInt</i> (Y_1)	25 to 999 battle-related deaths	UCDP/PRIO Armed Conflict Dataset	0 = 334 1 = 44
<i>MajorInt</i> (Y_2)	More than 1,000 battle-related deaths	UCDP/PRIO Armed Conflict Dataset	0 = 371 1 = 7
<i>MajorOrMinor</i> (Y_3)	25 or more battle-related deaths	UCDP/PRIO Armed Conflict Dataset	0 = 327 1 = 51
<i>EthnicParty</i> (X_1)	Probability of two co-ethnics being from the same political party and two people in the same party being co-ethnics	Original measure	Range: 0.03 – 0.66 Mean: 0.17 Std. Dev.: 0.15
<i>ELF</i> (X_2)	Probability two people randomly drawn from a country are from different ethnic groups	Fearon and Laitin (2003)	Range: 0.04 – 0.93 Mean: 0.67 Std. Dev.: 0.23
<i>Proportional</i> (X_3)	‘1’ indicates a proportional legislative electoral system, ‘0’ indicates otherwise	CIA World Factbook and Institute for Democracy and Electoral Assistance	0 = 270 1 = 108
<i>Anocracy</i> (X_4)	‘1’ indicates a state with a Polity2 score between -5 and 5, ‘0’ otherwise	Polity IV Political Regime Characteristics and Transitions dataset	0 = 195 1 = 183
<i>Polity2</i> (X_5)	A state’s autocracy score subtracted from its democracy score	Polity IV Political Regime Characteristics and Transitions dataset	Range: -4 – 10 Mean: 3.99 Std. Dev.: 4.13
<i>Oil</i> (X_6)	A state’s total oil rents as a percentage of the state’s GDP	World Bank’s World Development Indicators	Range: 0 – 40.49 Mean: 1.68 Std. Dev.: 5.85
<i>NatRes</i> (X_7)	A state’s total natural resource rent as a percentage of the state’s GDP	World Bank’s World Development Indicators	Range: 0.003 – 62.73 Mean: 11.43 Std. Dev.: 9.70
<i>Regional</i> (X_8)	‘1’ indicates one or more regionally-based ethnic groups, ‘0’ otherwise	Ethnic Power Relations dataset	0 = 70 1 = 308
<i>LogPop</i> (X_9)	The natural log of a state’s population	World Bank’s World Development Indicators	Range: 13.99 – 18.97 Mean: 16.27 Std. Dev.: 1.08
<i>Mountain</i> (X_{10})	The proportion of a country that is mountainous	Fearon and Laitin (2003)	Range: 0 – 82.20 Mean: 11.42 Std. Dev.: 20.86
<i>Durable</i> (X_{11})	Number of years since the most recent regime change	Polity IV Political Regime Characteristics and Transitions dataset	Range: 0 – 47 Mean: 10.26 Std. Dev.: 10.09
<i>LogGDPpc</i> (X_{12})	The natural log of the GDP per capita for each country-year	World Bank’s World Development Indicators	Range: 4.66 – 9.16 Mean: 6.52 Std. Dev.: 1.02

Table 11: Correlation Matrix of Independent and Control Variables												
	<i>Ethnic Party</i>	<i>ELF</i>	<i>Proportional</i>	<i>Anocracy</i>	<i>Polity2</i>	<i>Oil</i>	<i>Nat Res</i>	<i>Regional</i>	<i>Log Pop</i>	<i>Mountain</i>	<i>Durable</i>	<i>Log GDPpc</i>
<i>EthnicParty</i>	1.000											
<i>ELF</i>	-0.246	1.000										
<i>Proportional</i>	0.233	-0.154	1.000									
<i>Anocracy</i>	0.008	0.292	0.008	1.000								
<i>Polity2</i>	0.062	-0.251	0.009	-0.803	1.000							
<i>Oil</i>	-0.022	0.232	-0.178	0.248	-0.099	1.000						
<i>NatRes</i>	0.161	0.066	-0.061	0.291	-0.196	0.484	1.000					
<i>Regional</i>	-0.276	0.699	-0.121	0.121	-0.142	0.135	0.057	1.000				
<i>LogPop</i>	-0.145	0.396	-0.051	0.337	-0.255	0.475	0.251	0.341	1.000			
<i>Mountain</i>	0.208	-0.672	0.035	-0.149	0.076	-0.088	0.030	-0.587	-0.131	1.000		
<i>Durable</i>	-0.113	-0.031	0.034	-0.322	0.289	-0.080	-0.337	-0.053	-0.417	-0.218	1.000	
<i>LogGDPpc</i>	-0.027	0.154	-0.015	-0.359	0.392	0.080	-0.397	0.033	-0.187	-0.195	0.683	1.000

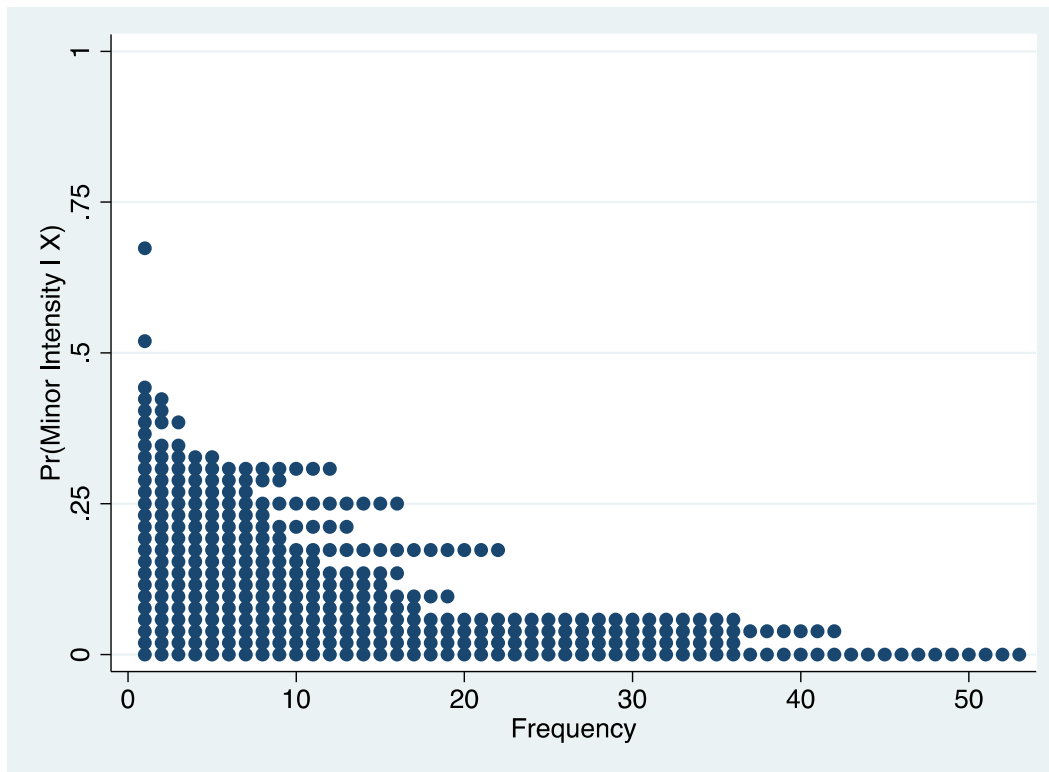


Figure 4: Testing for Outliers in the Probability of Minor Conflict

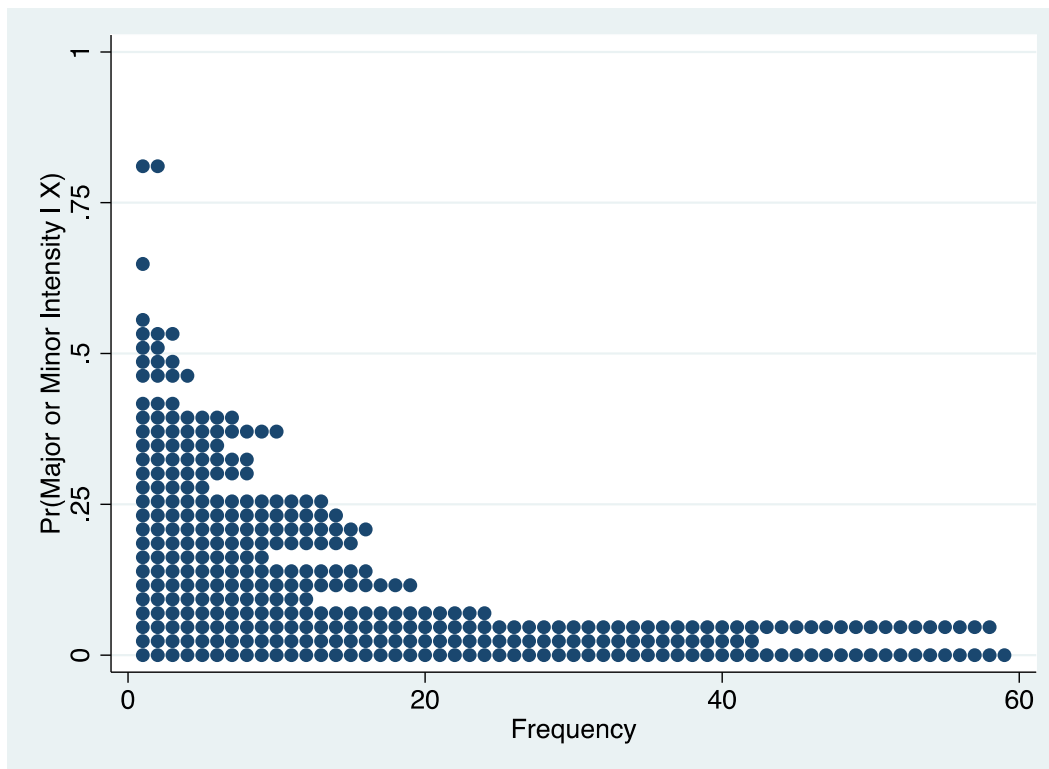


Figure 5: Testing for Outliers in the Probability of Major or Minor Conflict

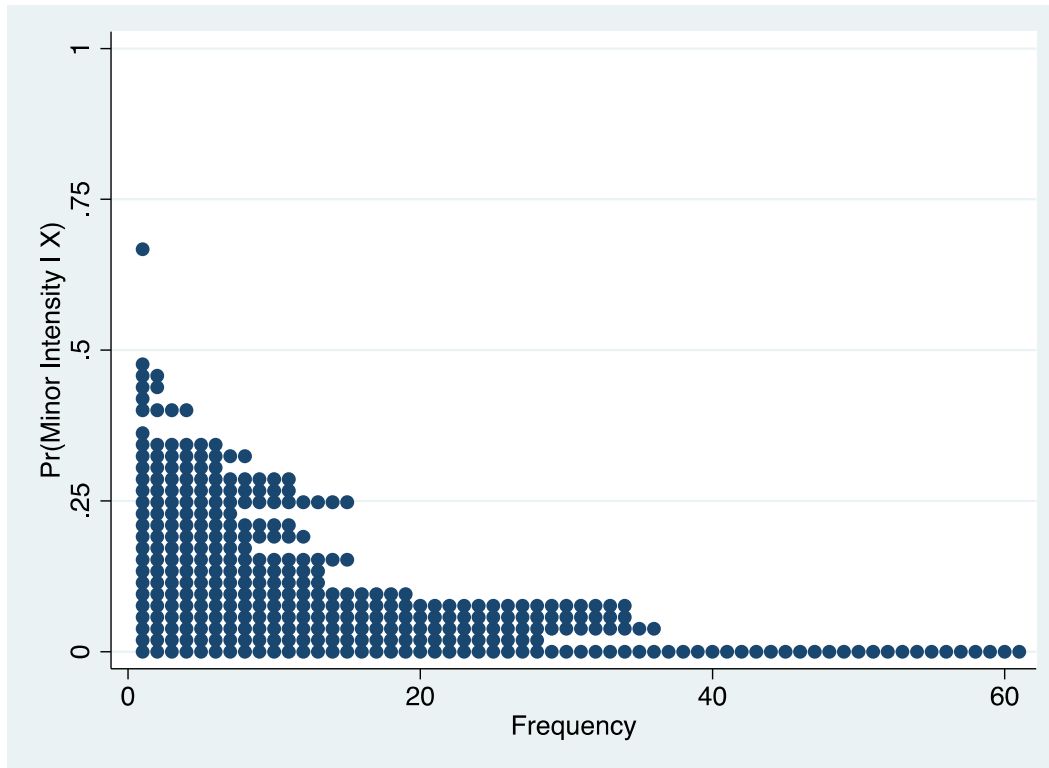


Figure 6: Testing for Outliers in the Probability of Minor Conflict Controlling for Proportional Systems

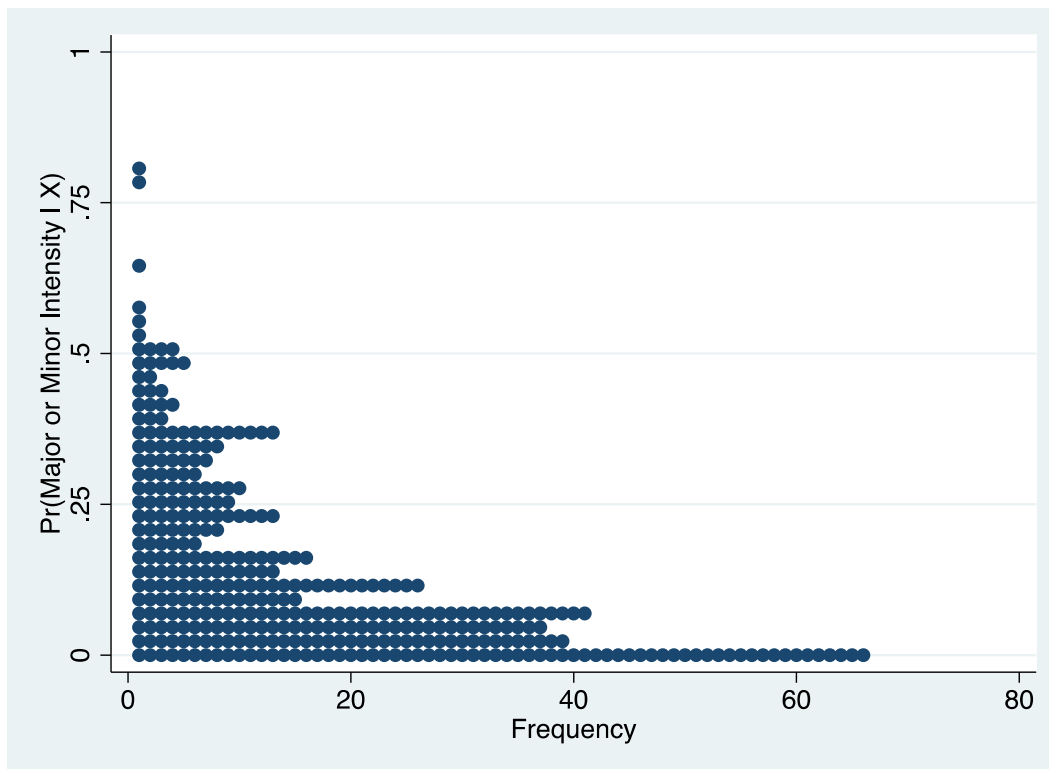


Figure 7: Testing for Outliers in the Probability of Major or Minor Conflict Controlling for Proportional Systems

VITA

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