Ethnic Inequality and the Dismantling of Democracy: A Global Analysis*

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Abstract

Does inequality between ethnic groups destabilize democracies? While the literature largely agrees that inequality harms democracies, previous studies typically focus on the overall level of inequality in a society; leaving questions about the effect of inequality between ethnic or religious groups unanswered. This paper bridges this gap and argues that inequality between ethnic groups harms the consolidation of democracy, but that its effect is strongest when inequality within groups is low. Using group- and country-level data from a total of 75 democracies and more than 250 ethnic groups worldwide, I conduct the first cross-national test to date of the effect of ethnic inequality on transitions away from democracy. Results provide support for my hypothesis: when within-group inequality (WGI) is low, between-group inequality (BGI) harms democracy; but when WGI is high, BGI has no discernable effect.

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"A society, therefore, which is ridden by a dozen of oppositions along lines running in every direction may actually be in less danger of being torn with violence or falling to pieces than one split along just one line. For each new cleavage contributes to narrow the cross clefts, so that one might say that society is sewn together by its inner conflict."

Edward Alsworth Ross, 1920, pp.164-65, emphasis in the original.

**Introduction**

Does inequality *between* ethnic groups destabilize democracies? The literature on democracy has witnessed a proliferation of studies about the relationship between economic inequality and political regimes; with most authors agreeing that inequality harms the consolidation of democracy (e.g., Boix 2003; Haggard and Kaufman 2012; Houle 2009; Muller 1988). Yet this literature typically focuses on the *overall* level of inequality in a society; leaving questions about the effect of inequality between ethnic or religious groups on the dismantling of democracy unanswered. Meanwhile, an important literature examining the effect of horizontal inequality – i.e. inequality between culturally defined groups – on civil conflicts has emerged (e.g., Cederman et al. 2011; Esteban and Ray 2011; Gubler and Selway 2012; Østby et al. 2009; Østby 2008; Stewart 2000, 2002, 2008). These authors argue and empirically demonstrate that countries with higher levels of horizontal inequality are more likely to experience civil wars. Surprisingly, these literatures have largely developed independently of one another. Despite being shown to play a key role in civil conflicts, the effect of inequality between ethnic groups on the dismantling of democracy has yet to be analyzed theoretically and tested empirically within a cross-national setting.

The lack of attention given to the effect of inequality between ethnic or religious groups is especially puzzling in light of the central role played by the structure of social cleavages among pioneered theories of democratic stability (e.g., see Dahl 1956, 1971;
Diamond 1988; Dunning and Harrison 2010; Lipset 1960; Lipset and Rokkan 1967; Rae and Taylor 1970; Ross 1920; Simmel 1908; Truman 1951; Verba 1965). These authors argue that reinforcing cleavages destabilize democracies, whereas cross-cutting cleavages – meaning that, for example, ethnic groups are themselves broken down by other cleavages – promote the consolidation of democracy by weakening the destabilizing effect of any single cleavage. Reinforcing cleavages are claimed to accentuate in-group loyalties; enabling groups to mount challenges against democratic regimes. Moreover, coinciding cleavages tend to create stable electoral majorities, rendering smaller groups unlikely to respect the democratic process (Chandra 2005). These arguments are supported by multiple case studies (e.g., see Diamond 1988 on Nigeria; Rokkan 1967 on Norway; Lin and Zhang 1998 on Taiwan).

This paper bridges this gap by analyzing and testing the effect of inequality between and within ethnic groups on the dismantling of democracy. I argue that between-ethnic group inequality (BGI) – or horizontal inequality – destabilizes democratic regimes, but that its effect is strongest when inequality within groups (WGI) is low. Under conditions of high BGI and low WGI, ethnic and class cleavages reinforce each other. I theorize that, when WGI is low, BGI destabilizes democracy (1) by accentuating conflicts over distribution/redistribution; and (2) by increasing the saliency of ethnicity.

First, as BGI increases, the gap between the preferences of different groups over economic policies widens – inciting them to impose their preferred policy through an autocracy. The effect of BGI is largest when WGI is low because different members of each group share similar economic preferences, enabling them to agree over post-democracy policies. When WGI is sufficiently high, however, increasing BGI does not undermine democracy because members of the same groups have very different policy preferences. Second, high levels of BGI combined with low levels of WGI strengthen in-group loyalties by creating clear demarcations between members of different groups; thus reinforcing the saliency of ethnicity. This, in turn, magnifies the dangers for democracy inherent to
Using survey data from the Demographic and Health Surveys (DHS), the Afrobarometer, the World Values Survey (WVS), the Latinobarometer, the International Social Survey Program (ISSP) and the Comparative Study of the Electoral Systems (CSES), I construct a data set on inequality between and within ethnic groups covering a total of 75 democracies worldwide and more than 250 ethnic groups between 1960 and 2008. Only eight ethnically heterogenous countries that have been democratic during at least one year during the period covered are omitted from the analysis because of the lack of data on BGI/WGI. Using group- and country-level analyzes, I conduct the first cross-national test to date of the effect of ethnic inequality on transitions away from democracy. Results provide support for my hypothesis: when WGI is low, BGI harms democracy; but when WGI is high, BGI has no discernible effect.

**Ethnic Inequality and Democratic Consolidation**

Although there are still controversies about the relationship between inequality and the likelihood of becoming a democracy, most authors agree that inequality destabilizes already established democracies (e.g., Boix 2003; Haggard and Kaufman 2012; Houle 2009; Muller 1988). Inequality is argued to increase the likelihood of democratic breakdowns notably because it increases the incentives of different social classes to control the regime in order to impose their preferred economic policies (Acemoglu and Robinson 2006; Boix 2003; Dahl 1971). When applied to the question of redistribution in democracies, the median voter theorem suggests that unequal democracies should redistribute more than those that are more equal (Meltzer and Richard 1981). Inequality increases the incentives of rich groups to overthrow the regime and install an autocracy.

There is also a large literature that relates ethnic diversity to instability in democracies (e.g., Dahl 1971; Rabushka and Shepsle 1972). Because ethnicity is largely (though
not fully) ascriptive and unchangeable, it may lead to more serious conflicts than other cleavages that are more fluid, such as those based on social classes (Horowitz 1985). Case studies indeed point to ethnicity as a major source of unrest.

Combining these literatures raises the question of what is the effect of inequality between and within ethnic groups on the consolidation of democracies. I address this question by first looking at a related literature on the effect of ethnic inequality on civil wars (e.g., Cederman et al. 2011; Esteban and Ray 2011; Gubler and Selway 2012; Kuhn and Weidmann 2014; Østby et al. 2009; Østby 2008; Stewart 2000, 2002, 2008). While this literature largely agrees that BGI induces conflicts, it is much more divided on the effect of WGI.

A first group of authors argues that the positive effect of BGI on conflict becomes more pronounced as WGI increases (e.g., Esteban and Ray 2011; Gates 2002; Kuhn and Weidmann 2014). The idea is that war necessitates manpower and financial resources. A high level of within-group inequality means that there is a large group of poor people with low opportunity costs that are willing to fight for small financial compensations, and a group of rich individuals that are able to finance the conflict. Within-group inequality is thus argued to enhance the capacity of a group to finance a full-scale war.

The logic of this argument, however, cannot be easily extended to transitions away from democracy. This is mainly because, although some democratic breakdowns take the form of civil wars, the vast majority are caused by coups. For example, of the 39 transitions to autocracy covered by the data set used below, only one took the form of a civil war (Congo 1997). The remaining transitions were driven by military or executive coups. Many occurred in the midst of wars but, in the end, it was a coup that directly caused the demise of the regime (e.g., Uganda 1985). In fact, democratic breakdowns have usually been modeled as coups in the game theory literature (e.g., Acemoglu and Robinson 2006; Boix 2003; Dunning 2008).

However, coups, contrary to wars, do not necessitate large fighting forces and fi-
nances, because they rarely involve prolonged fighting (Collier and Hoeffler 2005). This argument can also difficultly be extended to small-scale political disorder (that falls short of civil war) which often indirectly contributes to the undoing of democracy (see Diamond 1988; Lipset 1960). In short, democratic reversals are almost always inexpensive in both manpower and financial resources.

A second school of thought draws on the literature on coinciding and cross-cutting cleavages and instead contends that WGI weakens the effect of BGI on civil war, notably because it reduces within-group cohesion (e.g., Gubler and Selway 2012; Horowitz 1985; Sambanis and Milanovic 2011; Stewart 2000). These arguments have been applied to cleavages beyond class and ethnicity. For example, using a similar logic, Cederman et al. (2007) have shown that conflicts are more likely when ethnicity and geography reinforce each other, and Seul (1999) and Selway (2011) when ethnicity and religion reinforce each other.

Below, I argue that the arguments of these authors can be applied to transitions away from democracy, and hence that the destabilizing effect of BGI on democracy weakens as WGI increases. In fact, most authors studying democratic consolidation, small-scale instability (rather than civil wars) or ethnic voting have espoused the second view (e.g., Dahl 1956, 1971; Diamond 1988; Dunning and Harrison 2010; Lin and Zhang 1998; Lipset 1960; Lipset and Rokkan 1967; Truman 1951). Building on this rich literature, I theorize that, when WGI is low, BGI destabilizes democracy (1) by generating conflicts over the distribution of wealth/income; and (2) by reinforcing the saliency of ethnicity.

**BGI Creates Distributional Conflicts**

As discussed above, previous authors have argued that inequality between social classes harms democracy by stirring distributive conflicts (e.g., Acemoglu and Robinson 2006; Boix 2003). Here, I extend this argument to a case in which the population is divided along both class and ethnic lines.
Imagine a democracy in which there are two or more ethnic groups and assume that political leaders tend to adopt the policies, including redistributive and economic policies, preferred by members of their own groups. These policies need not be restricted to income taxation and redistribution. One potential source of contention, for example, can be the working language of the government, which has distributive implications through access to bureaucratic jobs (Selway 2011). Further assume that a sub-group of an ethnic group (usually its elites) can initiate a transition to autocracy at a certain cost, \( C > 0 \). After a successful coup, coups leaders, who form the new ruling elites, have to adopt a new set of economic policies that would guarantee the support of the remaining members of their group. The ruling elites does so by adopting a policy that is a combination of the preferred policies of the different members of the group.

Between-group inequality widens the gap between the economic preferences of the different groups; increasing the incentives of any given group to depose the regime and adopt its own preferred policies. A group that is poor, for example, would want to control policies in order to adopt a high level of redistribution and other poor-friendly policies, while a rich group would want to do the opposite.

However, the magnitude of the effect of BGI depends on the level of WGI, which, for simplicity, can be conceived as inequality between the elites of a group (who are assumed to carry out the coup) and its other members. The higher WGI, the greater the difference between the preferences of the elites and non-elites of the group, and thus the farther from their own preferences is the policy that must be adopted by the former to gain the support of the latter. Within-group inequality thus lowers the benefits of taking power for any potential coup leaders; hence reducing, for any fixed \( C \), the likelihood that a coup will be staged in the first place.

But why is inequality more destabilizing when it is reinforced by ethnicity? One could imagine, for example, that inequality between and within alternative (i.e. non-ethnic) types of groups, such as social classes, could have the same implications for democracy.
Ethnicity magnifies the destabilizing effect of inequality because it lowers the cost of staging a coup \((C)\) and decreases the cost associated with establishing and maintaining a new regime. For one thing, ethnicity provides political entrepreneurs with dense social networks and other tools, such as a shared language, that can be used to reach and mobilize potential supporters (Gubler and Selway 2012; Selway 2011).

Ethnicity also reduces the *ex ante* uncertainty associated with staging a coup and founding a new regime, effectively reducing their costs. Due to its ascriptive and sticky nature (Horowitz 1985; Selway 2011), ethnicity provides an easily identifiable and *stable* source of political support on which coup leaders can rely. When most people support leaders from their own group, co-ethnics have little ‘exit’ option short of supporting another ruler of their group. Rulers thus have incentives to only target their co-ethnics when, for example, octroying benefits/services; creating a stable equilibrium. Class affiliations, however, are much more fluid, meaning that supporters are harder to identify and more likely to switch their allegiance. In other words, inequality between ethnic group is more destabilizing than, for instance, inequality between social classes.

**BGI Increases the Saliency of Ethnicity**

Between-group inequality, when combined with low levels of WGI, increases the saliency of ethnicity, which in turn harms democratic consolidation. While above I argued that ethnicity makes inequality more destabilizing, this section argues that inequality – when it falls along ethnic lines – enhances the dangers inherent to ethnicity. A combination of high BGI and low WGI levels creates clear demarcations between groups; increasing in-group loyalties, for example, through a shared history of grievance (Gubler and Selway 2012; Selway 2011; Stewart 2000). Individuals are more likely to relate to other members of their ethnic group if they (1) share the same living conditions as them (low WGI), and (2) live under very different conditions than members of other groups (high BGI).

[Figure 1 about here]
Figure 1 illustrates my argument by showing how WGI affects within-group identification. It gives the mean income of groups A and B (A and B) as well as standard deviations around the mean of each distribution. Groups with wider standard deviations have higher levels of WGI. Between-group inequality is kept constant across cases (A and B are fixed). In Case 1, WGI is low for both groups, and thus I expect within-group loyalty to be strong. Case 2 illustrates a situation in which WGI is high for both groups. Within-group loyalty should be particularly weak because of the large overlap between the two distributions.

This argument builds on early work on the structure of social cleavages according to which individuals’ loyalty to other members of their group along a particular cleavage (e.g., ethnicity, class, religion, urban/rural or geography) strengthens when they find themselves in the same group along other cleavages (Lipset 1960; Rae and Taylor 1970; Ross 1920; Simmel 1908). For example, if an individual shares the same religious affiliation as members of other ethnic groups, he/she will be more likely to enter in contact with them, and less likely to perceive himself/herself as fundamentally different. Many authors have applied this argument more specifically to ethnicity – rather than social cleavages in general – and have argued that ethnicity becomes more salient when it is reinforced by other cleavages (e.g., Chandra 2005; Diamond 1988; Laitin 1986; Lipset 1960; Selway 2011). For example, using experimental data from Mali, Dunning and Harrison (2010) demonstrate that cross-cutting ties reduce ethnic voting.

Ethnicity, in turn, becomes more dangerous to democracy as its saliency increases (Chandra 2005; Diamond 1988; Laitin 1986; Lipset 1960; Rabushka and Shepsle 1972). In fact, most quantitative studies find that the mere existence of ethnic divisions does not induce democratic breakdowns (e.g., Houle 2009; Papaionannou and Siourounis 2008). Imagine two democracies with similar levels of ethnic diversity: S in which ethnicity is highly salient, and N in which ethnicity is not as salient. A sub-group from a given ethnic group can overthrow a democracy, for example, to set policies or gain access to spoils.
Political entrepreneurs relying on ethnicity (and their supporters) are assumed to share similar goals to those relying on alternative cleavages: they often compete over power, resources and policy influence rather than cultural values (see Cohen 1969; Diamond 1988).

Political entrepreneurs from democracy $S$ face a lower cost of staging a coup, and can more easily establish and maintain the new regime than those from $N$. As argued above, the ascriptive and sticky nature of ethnicity means that political entrepreneurs from $S$ have a ready-made group of supporters that can be reached through already existing social networks, and that are unlikely to withdraw their support. Potential coup leaders from $N$, however, are not even sure that their co-ethnics will support them during and after a coup; rendering them less likely to stage one.

Moreover, as ethnicity’s saliency increases, elections become increasingly determined by mere demographics, which decreases the incentives of smaller groups to comply with the rules of the democratic game (Chandra 2005). As argued by Przeworski (1991), *ex ante* uncertainty over the electoral process is an essential component of any well-functioning democracy. Such situations can lead to an environment of intense political tensions (that may or may not rise to the level of civil war) which, in turn, can harm democratic consolidation (Diamond 1988; Lipset 1960). In fact, political disorder often creates incentives and opportunities for members of groups others than those directly in conflict with the government – including those that are politically dominant – to usurp power (see the example of Guatemala 1982, discussed below).

As suggested by this last point, the logic of my arguments does not, in principle, preclude members of ethnic groups that are already politically dominant from overthrowing a democracy. Ethnic inequality could influence members of a dominant group to stage a military or executive coup, for example, if they believe they may lose an election or if they want to enhance their dominance. Carrying out a successful coup usually requires some access to power, meaning that members of dominant groups are actually advantaged in
that regard (Roessler 2011). Therefore, the analysis below develops two sets of BGI/WGI indicators: one that measures inequality between each ethnic group (including those that are dominant) and the country’s average; and a second that measures inequality between politically excluded and dominant groups.

Furthermore, my argument implies not only that groups with high BGIs (and low WGIs) are more likely to initiate breakdowns, but also that democracies with high BGI and low WGI, across all groups, should be more unstable. This can be illustrated by Case 3 of Figure 1 in which one group has a large (group B) and the other a low (group A) WGI. My argument suggests that within-group loyalty should be weaker than in Case 1 but stronger than in Case 2 for both groups (although within-group loyalty should be stronger for A than B). The overlap between the two distributions is larger than in Case 1 but smaller than in Case 2. Even for group A, the fact that many members of group B share a similar income level decreases within-group identification relative to Case 1. I thus conduct empirical tests both at the group and country levels.

Data

The main sample consists of 71 countries that have been democratic during at least one year between 1960 and 2008, although four additional countries are covered in Table A14 of the on-line appendix (which uses an alternative indicator of democracy). Figure 2 shows the countries that are included in the sample (countries in light blue). Countries in white cannot be included either because they have been non-democratic during the full period covered (e.g., China) or because they have been coded as ethnically homogeneous (e.g., Denmark) in the Ethnic Power Relations (EPR) data set, on which I rely to identify ethnic groups. By definition, one cannot calculate inequality between ethnic group in countries that do not have multiple ethnic groups. Similarly, one cannot study democratic consolidation in countries that have never been democratic.
As shown in Figure 2, only eight ethnically diverse democracies – the Dominican Republic, France, the Gambia, Guinea-Bissau, Israel, Lebanon, Mongolia and Myanmar – are excluded because of the lack of data on BGI and WGI (countries in black). As made clear by Figure 2, the overwhelming majority (more than 90 percent) of all ethnically heterogeneous democracies are included in my data set. All countries included in the sample are listed in Table A1 of the on-line appendix.

The empirical section is divided in two sections. In the first set of analyzes, the unit of analysis is the group-year. The data set used in the main model covers more than 5,200 observations on 241 ethnic groups and 71 democracies between 1960 and 2008. In the second section, the unit of analysis becomes the country-year and the sample contains more than 1,600 observations.

**Testing Strategy and Dependent Variable**

In all tests, the sample is restricted to countries that started the year as democracies. I use two binary measures of democracy. The main models use the indicator of Cheibub et al. (2010) which classifies regimes as democratic if the executive and legislature are selected through free and fair elections, there are more than one party and there has been at least one alternation in power through elections. This data set extends the well-known measure of Przeworski et al. (2000) from 2002 to 2008. Table A14 of the on-line appendix reproduces the analysis with the indicator of Boix et al. (2013).

In the group-level analysis, the dependent variable is a dummy variable that takes the value one if a group has initiated a transition away from democracy within a given year. Using probit models, I test the effect of BGI on the likelihood that a group instigates a democratic reversal. In the country-level models, I employ dynamic probit models to test the effect of BGI on the probability that a democracy transitions to autocracy.
Independent Variables

To construct measures of BGI and WGI, I use survey data from the Demographic and Health Surveys (DHS), the Afrobarometer, the World Values Survey (WVS), the Latino-barometer, the International Social Survey Program (ISSP) and the Comparative Study of the Electoral Systems (CSES).\textsuperscript{11} Table A1 of the on-line appendix gives the survey(s) used to calculate the values for each country. The WVS, Latinobarometer, ISSP and CSES have information on the income of the respondents.\textsuperscript{12}

The DHS and Afrobarometer, however, do not directly ask the income of the respondents. Most countries covered by these surveys are relatively poor. Monetize income is simply not as relevant in poor countries because most of the population has little access to cash income and does not monetize its income (Baldwin and Huber 2010). For example, the Afrobarometer does not ask questions on income simply because such information would be unreliable in Africa (Bratton 2008). The authors that use the Afrobarometer or DHS to study income/poverty typically instead use questions about the ownership of assets (e.g., Dionne, Inman and Montinola 2014; Østby 2008). Some authors have argued that asset ownership is actually a better measure of economic well-being in poor countries than monetize income (e.g., Bratton 2008; Dionne, Inman and Montinola 2014).

I follow this strategy and construct an asset-based wealth (ABW) indicator of economic well-being for countries covered by the DHS and Afrobarometer. The DHS asks respondent whether they have the following goods: a refrigerator, a television, a radio, access to electricity, a bicycle and a car. For each respondent, I create a variable ranging from 0 to 6, where 0 indicates that the individual does not possess any of these goods, and 6 that he/she possesses them all. Similarly, the Afrobarometer asks respondents whether they own a radio, television and motor vehicle. Using these questions, I construct an indicator ranging from 0 to 3.

I use information on the ethnicity of the respondents to construct measures of BGI and WGI for each ethnic group and country. I then merge the data from the different sur-
veys. I do so by taking advantage of the fact that many countries are covered by multiple
surveys to calculate the systematic differences between the measures based on different
surveys. I standardize the observations to make them comparable across sources. Section
1 of the on-line appendix provides more information on the different data sources as well
as the method used to standardize the observations. Section 3 of the on-line appendix
shows that the results are robust to the use of alternative methods to standardize the ob-
servations and to the use of observations from a single survey (e.g., Tables A6 and A13
use only the DHS and Afrobarometer, respectively).

**Group-Level Indicators:** For each ethnic group, I calculate two versions of BGI/WGI.
I first calculate $BGI_1$ using the same formula as Cederman et al. (2011):

$$BGI_1 = \left[ \log(g/G) \right]^2$$  \hspace{1cm} (1)

where $g$ refers to the average ABW score (or income) of members of a given ethnic group,
and $G$ to the average ABW score (or income) of the country. I calculate $WGI_1$ simply by
computing the Gini coefficient in the ABW score (or income) among all members of that
group. An ethnic group is only covered by the data set if it is deemed politically relevant
in the EPR data set.\(^\text{13}\)

I also compute a second set of indicators ($BGI_2/WGI_2$). There are two main differ-
ences between the two sets of indicators. First, while $BGI_1/WGI_1$ cover all ethnic groups,$BGI_2/WGI_2$ cover only politically excluded groups (i.e. those that have no representa-
tion in the government). I classify a group as excluded if it has the status of regional
autonomy, powerless or discriminated in the EPR data set. Second, whereas $BGI_1$ mea-
sures inequality between a given group and its country’s average ($G$ in equation 1), $BGI_2$
measures inequality between a given excluded group and politically dominant group(s).
Politically dominant groups are defined as all groups that have some representation in the
government. These are those that are classified as junior partner, senior partner, dominant or monopoly in the EPR. Therefore, $BGI_2$ is calculated as follow

$$BGI_2 = [\log(g/D)]^2$$  \hspace{1cm} (2)

where $g$ refers to the average ABW score (or income) of members of a given ethnic group, and $D$ to the average ABW score (or income) of members of politically dominant group(s). I calculate $D$ by computing the weighted average of the ABW scores (or incomes) of the groups that are at least junior partners in the EPR. The weights are determined by the size of the groups. $WGI_2$ gives the Gini coefficient within a given excluded ethnic group.

**Country-Level Indicators:** I compute two sets of country-level indicators that mirror the group-level indicators. First, the country-level $BGI_1$ is a weighted average of all group-level $BGI_1$ of the groups of that country. Again, the weights are determined by the size of the groups. $WGI_1$ gives the weighted average of the Gini coefficients for all groups of a country. It indicates the average level of within-group inequality in that country.

To calculate the country-level $BGI_2$ I compute the weighted average of the $BGI_2$ for all excluded groups of that country. Therefore, the country-level $BGI_2$ of a country gives the average inequality level between politically excluded ethnic groups and the dominant group(s) (defined as all politically included groups) of that country. Finally, the country-level $WGI_2$ gives the average inequality level within all excluded groups of a country.

**Control Variables**

**Group-Level Controls Used in the Group-Level Analysis:** The group-level analysis uses a number of group-level control variables. I include a dummy variable indicating whether
an ethnic group is excluded from power. One could argue that excluded groups have 
more incentives to seize power. However, Roessler (2011) shows that groups that are out-
siders are less likely to stage coups but more likely to initiate rebellions. Since the vast 
majority of transitions to democracy take the form of military or executive coups rather 
than civil wars, it is also possible that excluded groups are more likely to cause break-
downs simply because they can more easily grab power. The variable Excluded takes the 
value one if a group has no representation in the executive. I also control for the size of 
a group. Roessler (2011) finds that larger groups are more likely to stage coups (and re-
bellions). Lastly, I include a dummy Poor that indicates whether a typical member of the 
group is poorer than the average citizen of the country. One may argue that my argument 
is more relevant to rich groups, that which to limit redistribution.

Country-Level Controls Used in the Group- and Country-Level Analyzes: I also use 
country-level controls that are usually employed in studies on democratic consolidation: 
GDP per capita, growth in GDP per capita, ethnic fractionization, the proportion of the 
population that is Muslim, a continuous measure of oil income, a dummy variable for 
Western democracies, the age of the democracy, and the proportion of democracies in the 
world. One potential problem is that WGI and BGI may correlate with the geographical dis-
persion of ethnic groups. When groups are clustered within specific regions, they may 
have very different income levels than other groups that live in other regions. At the 
same time, WGI is likely to be moderate. If geographically concentrated group can more 
readily overthrow regimes, then the estimated effect of BGI and WGI may be spurious. In 
the main text, I use the ethnic-geographical cross-cuttingness (EGC) indicator of Selway 
(2011) to measure the extent to which ethnic groups are geographically dispersed. The 
EGC takes the value one if there is complete dispersion of ethnic groups (i.e. geography 
and ethnicity completely cross-cut each other) and zero if there is perfect concentration.
(i.e. geography and ethnicity completely reinforce each other). I also redo the analysis with an alternative measure of geographical dispersion in Table A5 of the on-line appendix.

**Country-Level Controls Used in the Country-Level Analysis**: I add a variable *Power sharing* that takes the value one if the executive power is shared among different groups and zero if it is totally controlled by a single group. Moreover, I include a variable that gives the sum of the size of all groups that are politically dominant (i.e. that have a status of at least junior partner). Section 1 of the on-line appendix provides summary statistics and density distributions for the different measures of BGI and WGI and the other variables employed in the paper.

**Country Examples**

In this section, I link my argument to the data set on ethnic inequality presented above more closely through brief country examples. Table A2 ranks all democracies covered in the sample from the one with the highest to the lowest BGI level. I aim to show: (1) that many of the countries that are at the top of the ranking have also been found to have high levels of ethnic inequality by previous authors; (2) that many have experienced democratic breakdowns and/or democratic instability; and (3) that ethnic inequality has often contributed to instability (without necessarily being its primary driving force).

As expected, Nigeria, which has experienced two democratic breakdowns, is among the most ethnically unequal countries with the Igbos and Yorubas significantly richer than the Hausas/Fulanis. Previous authors have also found that ethnic inequality is particularly high in Nigeria, and that it has contributed to instability (Diamond 1988; Langer, Mustapha and Stewart 2007). Langer, Mustapha and Stewart (2007), for instance, find that inequality between the North and the South Provinces (measured through child mortality
rates) is higher in Nigeria than in Ghana or Côte D’Ivoire. They further report that ma-
ternal mortality rates are about nine and five times as large in the Northeast than in the
Southwest and Southeast, respectively (figures from the Northwest are similar to those
from the Northeast). Diamond (1988) argues that the presence of reinforcing cleavages
(particularly ethnicity and class) is among the factors that explain the demise of the First
Republic of Nigeria (1963-66). The Igbos, who instigated the 1966 breakdown, have a
$WGI_1$ value at the 10th percentile of all African groups in my data.

Peru is the most ethnically unequal country covered by the analysis due to its extreme
inequality level between indigenous and non-indigenous populations. Previous authors
have indeed found that ethnic and class cleavages coincide in Peru (e.g., see Caumartin,
Molina and Thorp 2008; Figueroa and Barron 2005; Thorp and Paredes 2010). Caumartin,
Molina and Thorp (2008), for example, report that indigenous are 4.38 times as likely as
non-indigenous to find themselves in extreme poverty, making Peru the most ethnically
unequal of the three countries they study (Peru, Guatemala and Bolivia).

Peru is one of only three countries that have witnessed three democratic reversals
within the sample. Although ethnic inequality is not the only (or even main) factor ex-
plaining why Peru has been so unstable, it did play a role. For example, ethnic inequality
has contributed to the rise of the Shinning Path (Caumartin, Molina and Thorp 2008;
Figueroa and Barron 2005; Thorp and Paredes 2010). The civil war (and the economic
crisis), in turn, contributed to the ascension to power of Fujimori in 1990 and the execu-
tive coup of 1992 (Haggard, Kaufman and Teo 2012). Lacking a majority in Congress,
Fujimori staged a coup allegedly to have a freer hand in fighting the Shining Path and
adopting economic reforms. Therefore, “horizontal inequalities [i.e. BGIs] do contribute
to the social disorder in Peru, but not much in a direct way” (Figueroa and Barron 2005,
p. 1).

Like Peru, Guatemala is characterized by extreme inequalities between indigenous
and non-indigenous populations. Caumartin, Molina and Thorp (2008) find that indige-
nous are 4.1 times as likely to live under extreme poverty than non-indigenous (as compared to 2.68 times in Bolivia, for example). As in the case of Peru, ethnic inequality has had detrimental, though indirect, consequences on democracy. For example, it has contributed to the conflict between the Mayan population and the democratically elected government during the early 1980s (Caumartin, Molina and Thorp 2008), which facilitated the 1982 coup. According to Haggard, Kaufman and Teo (2012), “the deposing of the existing government came in the context of fears of the ineffectiveness of the incumbent government to manage distributive conflicts involving the large indigenous population” (p. 81).

The indigenous population has played a more direct role during the coup of Ecuador – another country with high indigenous/non-indigenous inequality – in 2000. The Confederation of Indigenous Nationalities of Ecuador (CONAIE), which is the main group representing the interests of the indigenous population, forced, along a group of junior military officers, President Mahaud to flee the country. According to Haggard, Kaufman and Teo (2012, p. 78), the CONAIE was largely motivated by distributive demands. Indigenous Ecuadorians have a WGI level at the 36th percentile.

Unsurprisingly, South Africa ranks near the top of Table A2. The extent of ethnic inequality in South Africa and its implications on political stability are well-documented (e.g., Nattrass and Seekings 2001; Stewart 2002). For example, the 2011 census showed that the average income of White households was six times as large as that of Black households (http://www.bbc.com/news/world-africa-20138322). However, South Africa has yet to experience a transition away from democracy and political instability has diminished since the end of the Apartheid.

Tensions between ethnic groups also played a key role during democratic breakdowns that occurred in other ethnically unequal countries (e.g., Sierra Leone 1967; Central African Republic 2003). For example, in Sierra Leone in 1967, after the SLPP – dominated by the Mendes – lost an election to the Northern (Temne and Limba) backed APC, a Mende-led
coup deposed the regime a few hours after power was handed to the APC. In such instances, coinciding ethnic and class cleavages may have contributed to the transitions, notably by increasing the saliency of ethnicity.

Canada is the most ethnically unequal Western country in the data (21st overall). This is caused by the wide inequalities between Aboriginal and non-Aboriginal Canadians and between English- and French-speaking Canadians, who represent 23 percent of the population (see Gee et al. 2007). The fact that francophones have traditionally been poorer than anglophones has been widely cited as one of the causes of the emergence of the Quebec nationalist movement in the 1960s, and reducing intergroup inequality as one of the movement’s explicit goals at its inception (e.g., see Fenwick 1981).

According to the 1965 Royal Commission on Bilingualism and Biculturalism commissioned by the federal government of Canada, intergroup inequality was the single most important cause of the English/French tensions. In fact, the national census of 1961 showed that, in Quebec, the income of anglophones was on average 49 percent higher than that of francophones. Inequality in asset ownership was found to be even more pronounced, with industrial manufacturing, in particular, being almost exclusively owned by anglophones (Fenwick 1981). Multiple studies have further demonstrated that within-group inequality among French-speakers was low (e.g., Béland and de Sève 1986; Langlois 2002). French-speakers find themselves at the 13th percentile of the WGI_1 distribution.

Canada has never experienced a democratic breakdown but tensions between French- and English-speakers did fuel democratic instability. For example, during the October Crisis of 1970, the kidnapping of two high-level government officials by the Quebec Liberation Front (FLQ) – one of which (the Deputy Premier and Minister of Labour) was eventually assassinated – prompted the government of Canada to deploy troops throughout Quebec and in Ottawa, and to use the War Measures Act (which suspended all civil liberties).
Validating the Indicators

This paper uses new indicators of BGI and WGI. Before presenting the empirical analysis, it is important to make sure that they capture the concepts of interest. As discussed above, countries that ranked as the most ethnically unequal in my data set were also found to have high BGI levels in previous studies. This section further assesses the validity of the indicators. One way to do so is to compare them with already existing indicators. The correlation coefficient between the group-level $BGI_1$ and the measure of BGI of Cederman et al. (2011), which is the most widely used measure available, is 0.496 ($p-value = 0.0001$).

Another way to validate a new measure of ethnic inequality is to examine whether groups that we already know are poorer (or richer) than other groups of their country are indeed found to be poorer (richer). In that regard, my measure does very well. For example, in the United States the Whites are found to be richer than African Americans and Latinos. In Belgium, the Flemish are wealthier than the French. As discussed above, in Canada English-speakers are richer than French-speakers, who in turn are richer than Aboriginal people. In fact, indigenous populations are found to be significantly poorer than non-indigenous populations throughout the sample (e.g., Argentina, Australia, Colombia, Ecuador, Guatemala, New Zealand and Peru). Blacks are poorer than Mulattos, who are poorer than Whites in Brazil. In other Latin American countries groups of African origins are also found to be poor (e.g., Colombia, Ecuador and Uruguay).

In Eastern Europe, Romas are significantly poorer than other ethnic groups, often placing countries with large Roma populations near the top of Table A2 (e.g., Romania, Bulgaria, Slovakia and Hungary). Turks are poorer than ‘Bulgarians’ in Bulgaria. In South Africa, the White populations (Afrikaners and English speakers) are richer than the Coloreds, who are richer than the Black groups (Zulus and Xhosas). In Uganda, groups from the Center and the South are much richer than those from the North, which explains why Uganda is the second most ethnically unequal country (Table A2). This is consistent with
data reported by Stewart (2002) that suggests that the average income is about twice as high in the Center/South than in the North. Finally, Igbos and Yorubas are richer than Hausas/Fulanis in Nigeria.

It is much more difficult to validate the measures of WGI than BGI. To my knowledge, there are no publicly available measures (like that of Cederman et al. 2011 for BGI). Moreover, since we have less extensive prior knowledge of the level of WGI (than BGI) for different groups, I cannot verify whether my measures of WGI match our expectations. However, Kuhn and Weidmann (2014) have recently constructed an alternative measure of WGI by combining data on light emission and geocoded ethnic settlement areas.\textsuperscript{24} To validate their measure, they also calculate the WGI for 17 African countries covered by the DHS using a procedure based on asset ownership similar to mine. They report that the correlation coefficient between their measure and that based on the DHS is 0.42 ($p - \text{value} = 0.00$).\textsuperscript{25} Lastly, the fact that my results hold across different surveys shows that they are not driven by problems specific to any survey, such as the reliance on ABW rather than income for some surveys.

**Empirical Analysis**

**Group-Level Analysis**

Table 1 reports the effect of BGI on the likelihood that an ethnic group initiates a democratic breakdown along with robust standard errors clustered by country. All explanatory variables are lagged. Models 1 and 2 include groups that are politically included and excluded. Between-group inequality is calculated as inequality between a group and its country’s average.

[Table 1 about here]
Column 1 tests my hypothesis by including $BGI_1$ and $WGI_1$ along with their interaction. The hypothesis is supported if the coefficients on $BGI$ is positive while the one on $BGI_1 * WGI_1$ is negative. To see this, notice that if the coefficients on $BGI_1$ is positive, $BGI_1$ increases the likelihood of democratic reversals when $WGI_1$ is zero. If the coefficient on $BGI_1 * WGI_1$ is negative, however, the effect of $BGI_1$ weakens, and may even reverse, as $WGI_1$ increases.

As shown in column 1, both variables have the expected signs and are statistically significant at the one percent level. Between-ethnic group inequality increases the chances that a group initiates a transition to autocracy when $WGI_1$ is low, but its effect diminishes as $WGI_1$ increases. In addition to testing the significance of each individual coefficient, I perform a joint test of $BGI_1$ and $BGI_1 * WGI_1$. The chi-squared statistic is 33.05 and is statistically significant at the one percent level ($p-value = 0.0000$). Table A9, section 4, of the on-line appendix further shows that BGI has little effect on breakdowns when one does not condition for WGI ($p-value = 0.827$).

As demonstrated by Ai and Norton (2003), one needs to be cautious when interpreting coefficients on interaction terms with nonlinear models. Therefore, in Figure 3 I show the marginal effect of $BGI_1$ on the probability that a group initiates a breakdown at different levels of $WGI_1$ along with 95 percent confidence intervals. As expected, $BGI_1$ harms democracies at low levels of $WGI_1$. However, when $WGI_1$ reaches a Gini coefficient of about 0.37, the effect of $BGI_1$ is no longer statistically significant at the five percent level.

As shown in Figure 3, once $WGI_1$ attains about 0.65, the effect of $BGI$ reverses and becomes positive. This is consistent with the theory on cross-cutting cleavages according to which deepening one cleavage may reduce the destabilizing effect of other cleavages. When interclass inequality is high, cross-ethnic coalitions based on alternative cleavages, such as social classes (see Boix 2003; Acemoglu and Robinson 2006), are less likely to challenge democracy. Under such conditions, increasing BGI may weaken the harmful
effect of interclass inequality by dividing social classes. However, only about one percent of the observations have $WGI_1$ values above 0.65.

Figure 4 gives the effect of $BGI_1$ on the predicted probability of a transition away from democracy at low (10th percentile) and high (90th percentile) levels of $WGI_1$. As expected, when $WGI_1$ is low, groups with high $BGI_1$ levels are likely to initiate a transition away from democracy. Among low $WGI_1$ groups, increasing $BGI_1$ from its mean (1.296) by one standard deviation (5.145) increases the predicted probability of a breakdown from 0.08 to 1.27 percent per year. The same change would actually reduce the likelihood of a breakdown from 0.21 to 0.06 percent among high $WGI_1$ groups.

Column 2 shows that the results are robust to the inclusion of the indicator of geographical dispersion of groups. Figure A9 of the on-line appendix gives the marginal effect of BGI on democratic breakdowns, calculated based on model 2. The marginal effect figures for all other estimations included in the main text are reported in section 8 of the on-line appendix. Models 3 and 4 reproduce models 1 and 2 but with only politically excluded groups ($BGI_2/WGI_2$). Results are unchanged. In columns 2-4, $BGI_1$ and $BGI_1 \times WGI_1$, and $BGI_2$ and $BGI_2 \times WGI_2$ are again found to be jointly significant at the one percent level ($p-value = 0.0000$ in all specifications).

Country-Level Analysis

I now look at the question of whether countries with higher levels of BGI are more likely to experience democratic breakdowns. Such an analysis enables us to examine whether democracies with reinforcing cleavage structures are most unstable; which is the question addressed by most of the early literature on democratic stability (e.g., Lipset 1960). As illustrated by Case 3 of Figure 1, the incentives of a group to overthrow a democracy, in
fact, may not only depend on its own WGI but also on that of other groups.

Table 2 tests the effect of BGI on the likelihood that a democracy transitions to autocracy using dynamic probit models. The estimates give the effect of each independent variable on the probability that a democracy breaks down within a given year. Positive coefficients indicate that the corresponding independent variable increases the likelihood of democratic reversal.

Columns 1 and 2 measure inequality between all ethnic groups and the country’s average. I test my hypothesis by using $BGI_1$, $WGI_1$ and their interaction. In both models, $BGI_1$ increases the chances that a democracy collapses when $WGI_1$ is low, but its effect diminishes and eventually reverses as WGI increases. Moreover, $BGI_1$ and $BGI_1 \times WGI_1$ are jointly significant at the one percent level ($p - value = 0.0000$ in both models). Table A10 of the on-line appendix demonstrates that BGI does not affect the likelihood of transition away from democracy when one does not condition for WGI ($p - value = 0.631$).

Figure 5 shows the marginal effect of $BGI_1$ on the probability of that a democracy collapses at different values of $WGI_1$. When $WGI_1$ is below 0.35, $BGI_1$ increases the likelihood of democratic breakdown and the relationship is significant at the five percent level. Figure 6 gives the effect of $BGI_1$ on the predicted probability of a transition away from democracy at low and high $WGI_1$ levels.

Models 3 and 4 of Table 2 replicate models 1 and 2 but only the politically excluded groups enter into the calculation of $BGI_2$ and $WGI_2$. Moreover, the reference group is now the dominant group(s) (defined as all politically included groups) rather than the country’s average. Therefore, $BGI_2$ reports the average level of inequality between politically excluded and dominant groups, and $WGI_2$ the average level of inequality within
the former. Results are unchanged. In both models, $BGI_2$ and $BGI_2 \ast WGI_2$ are jointly significant (p-values 0.0117 and 0.0245 respectively).

Most democratic breakdowns occur as the results of coups (including self-coups). In principle, civil wars could also directly cause transitions away from democracy, although such instances are much more rare in practice. Therefore, in section 5 of the on-line appendix, I estimate the effect of BGI on coups and rebellions waged against democracies (including those that have been unsuccessful). I use the civil war data of the Peace Research Institute Oslo (PRIO) and the coup data of Powell and Thyne (2011), which includes both failed and successful coups. Again, results suggest that BGI increases the likelihood that a coup or rebellion is initiated within a given year, but only when WGI is low.\(^{29}\)

**Discussion of the Control Variables**

Most of the control variables affect democracies in the ways predicted by the previous literature. As shown by Przeworski et al. (2000), higher levels of GDP per capita foster consolidation. However, the effect is relatively weak, which is consistent with the findings of Acemoglu et al. (2008). Nonetheless, when *Western* is omitted (as in Przeworski et al. 2000), income has a strong and highly significant stabilizing effect on democracy in most models (available upon request).

Economic crises have little effect on democratic stability. This is in line with the findings of Houle (2009) which suggest that economic crises better predict transitions to than from democracy. Moreover, democracies in which the executive is shared among many groups are somewhat more stable. Large groups are more likely to create instability which is consistent with the findings of Roessler (2011).

Politically excluded groups are less likely to initiate transitions to autocracy than those that are included. Since the overwhelming majority of democratic breakdowns take the form of military/executive coups rather than civil wars, this is consistent with the find-
ings of Roessler (2011) according to which excluded groups are less likely to stage coups but more likely to initiate civil wars. As expected, older democracies are more resilient and democratic breakdowns are less likely to occur when many countries are democratic.

Oil wealth is not always linked to democratic instability. This is consistent with the findings of Houle (2009) according to which oil harms democratization but not democratic consolidation, as illustrated by oil-rich democracies such as Norway. It is also in line with the findings of Haber and Menaldo (2011) that oil has little effect on regimes, and of Dunning (2008) that oil may, under certain conditions, even help consolidation.

Robustness Tests

The on-line appendix presents several additional robustness tests. First, in Table A14, I redo the main analysis with the measure of democracy of Boix et al. (2013) rather than that of Cheibub et al. (2010). Doing so enables me to cover four additional countries that are defined as authoritarian during the full period by Cheibub et al. (2010): Belarus, Mozambique, Russia and South Africa. Table A15 shows that the results are robust to the inclusion of country and year fixed effects. In Table A16, I include additional control variables: a dummy variable for former British colonies (Przeworski et al. 2000), religious fractionization, a dummy variable for countries that did not exist prior to 1946 (Przeworski et al. 2000), and the number of previous democratic breakdowns. Moreover, Table A17 shows that the results are not driven by outliers. Table A5 uses an alternative measure of the geographical dispersion of groups.

One potential problem with the analysis presented thus far is that not all democratic breakdowns are driven by ethnic tensions. It is, of course, unrealistic to believe that a single explanation could account for all transitions to autocracy. In section 6 of the online appendix, I thus reproduce the analysis with only sub-Saharan African countries using the data set of Roessler (2011) which indicates, for each coup and rebellion that occurred in sub-Saharan Africa, whether ethnicity was relevant to the coup/rebellion as well as the
ethnicity of its leader(s). I use this data set to determine whether ethnicity played a key role during the breakdown. I also test the effect of BGI on coups/rebellions (including those that were unsuccessful). Again, results support my hypothesis.

There are two other issues that deserve to be discussed. First, if some of the regressors are highly collinear, we could have multicollinearity problems. The correlation between BGI and WGI is 0.354 in the group-level data and 0.324 in the country-level data. To further assess whether there is multicollinearity, I rerun models 1 and 3 of Tables 1 and 2 with OLS to calculate the variance inflator factors (VIF) of the variables included in the regressions (without the interaction terms). None attains a VIF of ten, which is usually the threshold set to detect whether there is multicollinearity. In both regressions, the variable with the highest VIF is GDP per capita (5.19 and 4.66 respectively). BGI has VIFs of 1.23 and 1.36, and WGI of 1.71 and 1.85.

Finally, one could argue that my results are affected by endogeneity. Following the argument of Meltzer and Richard (1981), we should expect democracies to reduce inequality; which could explain why BGI is associated with higher probabilities of transition away from democracy (although it is less clear why BGI would only be harmful at low WGI levels). Unfortunately, it is difficult to instrument for BGI since it would require instruments correlated with BGI and WGI for each ethnic group. Such information is simply unavailable.

However, we can be relatively confident that the findings are not caused by reverse causality. First, inequality is notoriously persistent within countries over time. Many existing studies use a very low number of observations for each country to infer missing values. For example, Cederman et al. (2011) use a single year (1990) on each country to construct their BGI measure for the full post-Cold War period. This combined with the fact that many of my models include only democracies – meaning that being a democracy per se cannot affect the estimations – and my explanatory variables are always lagged, it is unlikely that my results are driven by the short-term effect of democracy on BGI.
One remaining possibility is that older democracies had more time than younger ones to reduce inequality. If older democracies are also more resilient, for example because their institutions are more developed, we could have a spurious negative relationship between inequality and the survival of democracy. Given that all models control for the age of the regime, the results are not driven by the effect of the age of the democracy.

Conclusion

While most authors agree that inequality harms the consolidation of democratic regimes, few studies have looked at the political implications of inequality between different groups – for example, defined along ethnic or religious lines – on the survival of democracies. This paper unpacks the relationship between inequality and democracy, and argues that BGI harms democracies when WGI is low, but that its destabilizing effect diminishes as WGI increases. Using group- and country-level data from 75 democracies, I test the effect of ethnic inequality on democratic consolidation. Although not definitive, my findings do provide support in favor of my hypothesis: when WGI is low, BGI is found to harm democracy; but when WGI is high, BGI has little effect.

One caveat with this paper is that, as made evident by some of the country examples, ethnic inequality is usually a structural rather than an immediate cause of transition away from democracy. To a certain extent this is unsurprising since ethnic inequality is largely constant through time, making it unlikely to explain the timing of a breakdown. Studies on how overall (or interclass) inequality, ethnic/religious diversity and religious affiliations, for instance, affect democratic reversals or civil wars face the same problem. For example, Acemoglu and Robinson (2006) argue that interclass inequality causes transitions away from democracy, but assume that exogenous shocks serve as triggers. More work on how ethnic inequality, and other structural factors, interacts with potential triggers to cause the dismantling of democracy ought to be conducted.
Notes

1These are the Dominican Republic, France, the Gambia, Guinea-Bissau, Israel, Lebanon, Mongolia and Myanmar.

2Both arguments remain largely untested because of data limitations. See Kuhn and Weidmann (2014), however, for a recent empirical analysis finding support for the first view.

3Franck and Rainer (2012), for example, find that in sub-Saharan Africa there is strong evidence that political leaders tend to favor members of their own group, even in democracies.

4One could argue that rich groups should be more likely to initiate breakdowns since democracy ensures that at least some redistribution takes place. However, the empirical literature has demonstrated that democracy does not necessarily increase redistribution or reduce inequality (e.g., Timmons 2010; Slater, Smith and Nair 2014). Moreover, authoritarian regimes are often neopatrimonial regimes, in which the rulers maintain power by providing material benefits to a coalition (often) based on ethnicity (Bratton and van de Walle 1997). Poorer members of a group may benefit more from redistribution in autocracies dominated by their group – which controls patronage networks – than in democracies not controlled by their group. The empirical analysis presented below, however, does find that rich groups are more likely to instigate transitions to autocracy.

5Cederman, Wimmer and Min (2010) find that ethnicity only increases the probability of civil war when it is politically salient.

6However, my argument does not depend on this assumption. If groups were instead motivated by cultural values we should also expect them to become more likely, for ex-
ample, to want to impose their culture through an autocracy as ethnicity becomes more salient.

7These countries are Belarus, Mozambique, Russia and South Africa.

8Boix et al. (2013) add a suffrage requirement and do not require an alternation in power through elections to have taken place.

9In order to code that variable, I have used the following data sets: the Archigos, the EPR, Roessler (2011), and Haggard, Kaufman and Teo (2012).

10The main country-level analysis covers 39 democratic collapses. Since some breakdowns were carried out by multiple groups, the group-level analysis contains 43 group-year observations in which a breakdown was initiated.

11For each country-year, I use the survey that is closest in time. This method is imperfect but remains valid since there is little change in inequality within countries over time. In fact, Cederman et al. (2011) use a single observation on BGI in 1990 as their indicator of BGI during the post-Cold War period.

12The WVS and Latinobarometer ask respondents to place themselves on a scale from 1 to 10 (where 1 denotes the lowest income), and the ISSP and CSES directly ask the income. See section 1 of the on-line appendix for more detail and the exact questions.

13The EPR defines an ethnic group as politically relevant “if at least one significant political actor claims to represent the interests of that group in the national political arena, or if members of an ethnic category are systematically and intentionally discriminated against in the domain of public politics” (Codebook, p.2).

14For example, consider a fictitious country with three ethnic groups A, B and C that constitute respectively 40, 35 and 25 percent of the population of the country. Further
assume that the group-level $BGI_1$ of these groups are 1, 2 and 0.5 respectively. Then the country-level $BGI_1$ of that country would be $\frac{4 \times 1 + 3.5 \times 2 + 2.5 \times 0.5}{4 + 3.5 + 2.5} = 1.225$.

15These are the groups that have a status of regional autonomy, powerless or discrimi-
nated in the EPR.

16GDP per capita and growth in GDP per capita are taken from Treisman (forthcoming),
ethnic fractionization the proportion of the population that is Muslim from Przeworski et
al. (2000), and oil income from Haber and Menaldo (2011). Western countries are defined
as Western European countries, the United States, Canada, Australia and New Zealand.

17In section 2 of the on-line appendix, I explain how I handled missing values in the
EGC data set.

18It takes the value one if more than one group is at least a junior partner.

19Peru has a WGI value near the average of the distribution.

20It must be noted, however, that the Shinning Path is not an ethnic movement, and the
war not an ethnic war (many indigenous people fought on the side of the government). In
fact, the Shinning Path carried out massacres against indigenous communities and most
of its victims were indigenous.

21The coup of Fujimori is not, however, an ethnic coup, since he had the support of the
majority of the poor (including indigenous people).

22The Whites have one of the lowest $WGI_1$ level of all groups. The $WGI_1$ of the Blacks,
however, is larger than the sample’s average, which is consistent with recent reports,
notably from the Organisation for Economic Co-operation and Development (OECD).

23Since Cederman et al. (2011) measure inequality between each group and its coun-
try’s average (like $BGI_1$) rather than between politically excluded and dominant group(s)
(as $BGI_2$), I did not calculate the correlation their indicator and $BGI_2$.

24 The data of Kuhn and Weidmann (2014) is not publicly available yet.

25 This corresponds to the variable $WGI_1$ in my group-level analysis because Kuhn and Weidmann (2014) do not omit groups that are politically included.

26 I use Wald tests, which are asymptotically equivalent to log-likelihood ratio tests but preferable when standard errors are clustered.

27 *Western* and *Poor* drop automatically from the regressions using $BGI_2$ and $WGI_2$. This is because no excluded group has been at the origin of a breakdown in a Western democracy during the period covered. Similarly, not a single poor group that was excluded has instigated a transition.

28 The number of observations decreases significantly because all groups that have some representation in the government are dropped.

29 I did not perform this analysis at the group-level because of the lack of information on the ethnicity of the coup leaders (outside sub-Saharan Africa). However, in section 6 of the on-line appendix I do perform this analysis at the group-level using only sub-Saharan African democracies. I use the data set of Roessler (2011), which identifies the ethnicity of coup/rebellion leaders.

30 Since most of the surveys used were conducted after 1980, Table A18 covers only the post-1980 period.
References


Figures and Tables

Figure 1: Effect of WGI on Within-Group Loyalty Keeping BGI Constant

Case 1: Low WGI in Groups A and B: High Within-Group Loyalty

Case 2: High WGI in Groups A and B: Low Within-Group Loyalty

Case 3: Low WGI in Group A, and High WGI in Group B: Intermediate Within-Group Loyalty for Both Groups

Note: A and B give the mean income of groups A and B, respectively. The boxes show the standard deviations around each mean. In Case 1 WGI for both groups is low and within-group loyalty is expected to be strong. Case 2 refers to a situation in which WGI for both groups is large, and so within-group loyalty weak. In Case 3, WGI of group A is low (as in Case 1) but that of group B is large (as in Case 2). Within-group loyalty is expected to be weaker than in Case 1 but stronger than in Case 2 for both groups.
Note: Countries included in the analysis are in light blue. Countries that cannot be used in the analysis either because they have been nondemocratic during the full period covered (1960-2008) or because they are ethnically homogenous are in white. Countries that have been democratic during at least one year and that are ethnically heterogeneous but that are not included due to the lack of data on BGI/WGI are in black. The missing countries are the Dominican Republic, France (and French Guyana), the Gambia, Guinea-Bissau, Israel, Lebanon, Mongolia and Myanmar. Democracies are identified using the data sets of Cheibub et al. (2010) and Boix et al. (2013). The Ethnic Power Relations (EPR) data set is used to determine if a country is ethnically heterogeneous.
Figure 3: Marginal Effect of BGI on Democratic Breakdowns Across WGI Levels – Group-Level Analysis

Note: Based on estimates from model 1 of Table 1. Dashed lines are 95 percent confidence intervals. For all ethnic groups, BGI gives inequality between that group and its country’s average. WGI refers to inequality within each ethnic group and covers all ethnic groups.
Figure 4: Effect of BGI on Democratic Breakdowns – Group-Level Analysis

Note: Based on estimates from model 1 of Table 1. For all ethnic groups, BGI gives inequality between that group and its country's average. WGI refers to inequality within each ethnic group and covers all ethnic groups.
Figure 5: Marginal Effect of BGI on Democratic Breakdowns Across WGI Levels – Country-Level Analysis

Note: Based on estimates from model 1 of Table 2. Dashed lines are 95 percent confidence intervals. BGI refers to the average inequality level between all ethnic groups of a country and the country’s average (i.e. it is the weighted average of all the group-level $BGI_1$ of a country). WGI refers to the average inequality level within all ethnic groups of a country (i.e. it is the weighted average of all the group-level $WGI_1$ of a country).
Figure 6: Effect of BGI on Democratic Breakdowns – Country-Level Analysis

Note: Based on estimates from model 1 of Table 2. BGI refers to the average inequality level between all ethnic groups of a country and the country’s average (i.e. it is the weighted average of all the group-level $BGI_1$ of a country). WGI refers to the average inequality level within all ethnic groups of a country (i.e. it is the weighted average of all the group-level $WGI_1$ of a country).
Table 1: Group-Level Probit Analysis of the Effect of BGI on Democratic Breakdowns

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<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
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<td>1.342 (***)</td>
<td>1.342 (***)</td>
<td>1.274 (***)</td>
</tr>
<tr>
<td>WGI_{1, t-1}</td>
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<td>1.761 (***)</td>
<td>1.761 (***)</td>
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</tr>
<tr>
<td>BGI_{1, t-1} * WGI_{1, t-1}</td>
<td>-1.678 (2.23)**</td>
<td>-1.938 (2.27)**</td>
<td>-1.938 (2.27)**</td>
<td>-1.678 (2.23)**</td>
</tr>
<tr>
<td>BGI_{2, t-1}</td>
<td>-0.678 (***)</td>
<td>-0.938 (***)</td>
<td>-0.938 (***)</td>
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<tr>
<td>WGI_{2, t-1}</td>
<td>1.570 (***)</td>
<td>1.761 (***)</td>
<td>1.761 (***)</td>
<td>1.570 (***)</td>
</tr>
<tr>
<td>BGI_{2, t-1} * WGI_{2, t-1}</td>
<td>-1.016 (2.52)**</td>
<td>-1.017 (2.52)**</td>
<td>-1.017 (2.52)**</td>
<td>-1.016 (2.52)**</td>
</tr>
<tr>
<td>Size_{t-1}</td>
<td>1.169 (***)</td>
<td>1.188 (***)</td>
<td>2.972 (***)</td>
<td>3.519 (***)</td>
</tr>
<tr>
<td>Excluded_{t-1}</td>
<td>-1.98 (1.23)</td>
<td>-1.17 (1.36)</td>
<td>-1.709 (1.13)</td>
<td>-1.709 (1.13)</td>
</tr>
<tr>
<td>Poor_{t-1}</td>
<td>-0.598 (1.21)**</td>
<td>-0.510 (1.23)**</td>
<td>-0.510 (1.23)**</td>
<td>-0.598 (1.21)**</td>
</tr>
<tr>
<td>GDP pc_{t-1}</td>
<td>-0.198 (1.23)</td>
<td>-0.171 (1.36)</td>
<td>-1.011 (0.98)</td>
<td>-1.011 (0.98)</td>
</tr>
<tr>
<td>Growth_{t-1}</td>
<td>0.027 (0.16)</td>
<td>0.027 (0.18)</td>
<td>0.027 (0.18)</td>
<td>0.027 (0.18)</td>
</tr>
<tr>
<td>Oil_{t-1}</td>
<td>0.108 (0.26)</td>
<td>-1.112 (0.28)</td>
<td>0.011 (0.22)</td>
<td>0.011 (0.22)</td>
</tr>
<tr>
<td>Ethnic frac_{t-1}</td>
<td>0.003 (0.005)</td>
<td>0.003 (0.005)</td>
<td>0.003 (0.003)</td>
<td>0.003 (0.003)</td>
</tr>
<tr>
<td>Muslim_{t-1}</td>
<td>-0.002 (0.002)</td>
<td>-0.001 (0.002)</td>
<td>-0.001 (0.002)</td>
<td>-0.001 (0.002)</td>
</tr>
<tr>
<td>Western_{t-1}</td>
<td>-0.076 (0.22)**</td>
<td>-0.803 (2.20)**</td>
<td>-0.803 (2.20)**</td>
<td>-0.076 (0.22)**</td>
</tr>
<tr>
<td>% World Dem_{t-1}</td>
<td>-0.494 (0.75)**</td>
<td>-4.615 (0.82)**</td>
<td>5.660 (3.31)**</td>
<td>5.660 (3.31)**</td>
</tr>
<tr>
<td>Age_{t-1}</td>
<td>-0.859 (0.19)**</td>
<td>-0.061 (0.20)**</td>
<td>-0.708 (0.25)**</td>
<td>-0.708 (0.25)**</td>
</tr>
<tr>
<td>Geo. Disp_{t-1}</td>
<td>0.066 (0.446)</td>
<td>-2.414 (1.57)**</td>
<td>-2.414 (1.57)**</td>
<td>-2.414 (1.57)**</td>
</tr>
<tr>
<td># Countries</td>
<td>71</td>
<td>66</td>
<td>61</td>
<td>57</td>
</tr>
<tr>
<td># Ethnic Groups</td>
<td>241</td>
<td>224</td>
<td>117</td>
<td>110</td>
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<tr>
<td>N</td>
<td>5208</td>
<td>4967</td>
<td>2110</td>
<td>2012</td>
</tr>
<tr>
<td>Log-pseudolik.</td>
<td>-152.693</td>
<td>-12.028</td>
<td>-12.028</td>
<td>-11.701</td>
</tr>
</tbody>
</table>

Note: Robust standard errors clustered by country in parentheses. For all ethnic groups, the group-level BGI gives inequality between that group and its country’s average. The group-level WGI gives inequality within each ethnic group and covers all ethnic groups. The group-level BGI includes only politically excluded groups, and measures inequality between that group and its country’s dominant group(s) (defined as all politically included groups). The group-level WGI refers to inequality within each ethnic group and covers only excluded groups. ***p < .01, **p < .05 and *p < .1.
Table 2: Country-Level Dynamic Probit Analysis of the Effect of BGI on Democratic Breakdowns

<table>
<thead>
<tr>
<th></th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>$BGI_{1,t-1}$</td>
<td>1.336</td>
<td>1.452</td>
<td>1.452</td>
<td>1.394</td>
</tr>
<tr>
<td></td>
<td>(.284)***</td>
<td>(.301)***</td>
<td>(.301)***</td>
<td>(.809)***</td>
</tr>
<tr>
<td>$WGI_{1,t-1}$</td>
<td>4.492</td>
<td>5.157</td>
<td>5.017</td>
<td>2.325</td>
</tr>
<tr>
<td></td>
<td>(1.103)***</td>
<td>(1.196)***</td>
<td>(1.025)***</td>
<td>(.740)***</td>
</tr>
<tr>
<td>$BGI_{1,t-1} \times WGI_{1,t-1}$</td>
<td>-3.652</td>
<td>-3.946</td>
<td>-3.652</td>
<td>-6.48</td>
</tr>
<tr>
<td></td>
<td>(.798)***</td>
<td>(.836)***</td>
<td>(.791)***</td>
<td>(.238)***</td>
</tr>
<tr>
<td>$BGI_{2,t-1}$</td>
<td>-1.00</td>
<td>-0.11</td>
<td>-0.008</td>
<td>-0.007</td>
</tr>
<tr>
<td></td>
<td>(.175)</td>
<td>(.182)</td>
<td>(.164)</td>
<td>(.184)</td>
</tr>
<tr>
<td>$Growth_{t-1}$</td>
<td>.020</td>
<td>.017</td>
<td>.021</td>
<td>.019</td>
</tr>
<tr>
<td></td>
<td>(.020)</td>
<td>(.021)</td>
<td>(.023)</td>
<td>(.023)</td>
</tr>
<tr>
<td>$Oil_{t-1}$</td>
<td>-3.97</td>
<td>-3.06</td>
<td>-2.72</td>
<td>-1.59</td>
</tr>
<tr>
<td></td>
<td>(.289)</td>
<td>(.267)</td>
<td>(.238)</td>
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<tr>
<td>$Ethnic frac_{t-1}$</td>
<td>-0.07</td>
<td>-0.11</td>
<td>-0.008</td>
<td>-0.11</td>
</tr>
<tr>
<td></td>
<td>(.006)</td>
<td>(.006)</td>
<td>(.008)</td>
<td>(.008)</td>
</tr>
<tr>
<td>$Muslim_{t-1}$</td>
<td>.002</td>
<td>.002</td>
<td>-0.008</td>
<td>-0.001</td>
</tr>
<tr>
<td></td>
<td>(.003)</td>
<td>(.003)</td>
<td>(.002)</td>
<td>(.003)</td>
</tr>
<tr>
<td>$Western_{t-1}$</td>
<td>-7.70</td>
<td>-8.10</td>
<td>-6.20</td>
<td>-6.16</td>
</tr>
<tr>
<td></td>
<td>(.490)</td>
<td>(.566)</td>
<td>(.492)</td>
<td>(.551)</td>
</tr>
<tr>
<td>% World Dem. $t-1$</td>
<td>-4.680</td>
<td>-4.909</td>
<td>-4.105</td>
<td>-4.069</td>
</tr>
<tr>
<td></td>
<td>(.798)***</td>
<td>(.888)***</td>
<td>(.900)***</td>
<td>(.938)***</td>
</tr>
<tr>
<td>$Age_{t-1}$</td>
<td>-0.08</td>
<td>-0.08</td>
<td>-0.03</td>
<td>-0.02</td>
</tr>
<tr>
<td></td>
<td>(.006)</td>
<td>(.006)</td>
<td>(.007)</td>
<td>(.007)</td>
</tr>
<tr>
<td>$Size Dom._{t-1}$</td>
<td>-1.761</td>
<td>-1.986</td>
<td>-1.349</td>
<td>-1.655</td>
</tr>
<tr>
<td></td>
<td>(.431)***</td>
<td>(.475)***</td>
<td>(.630)***</td>
<td>(.636)***</td>
</tr>
<tr>
<td>$Power Sharing_{t-1}$</td>
<td>-0.84</td>
<td>-2.02</td>
<td>.055</td>
<td>.022</td>
</tr>
<tr>
<td></td>
<td>(.229)</td>
<td>(.250)</td>
<td>(.230)</td>
<td>(.252)</td>
</tr>
<tr>
<td></td>
<td>(.386)***</td>
<td>(.386)***</td>
<td>(.445)***</td>
<td>(.445)***</td>
</tr>
</tbody>
</table>

# Countries 71 66 61 57
N 1607 1474 1222 1153
Log-Lik. -137.71 -127.539 -125.542 -120.086

Note: Robust standard errors clustered by country in parentheses. The country-level $BGI_{1}$ refers to the average inequality level between all ethnic groups of a country and the country’s average (i.e. it is the weighted average of all the group-level $BGI_{1}$ of a country). The country-level $WGI_{1}$ refers to the average inequality level within all ethnic groups of a country (i.e. it is the weighted average of all the group-level $WGI_{1}$ of a country). The country-level $BGI_{2}$ refers to the average inequality level between politically excluded ethnic groups and the dominant ethnic groups (defined as all politically included groups) (i.e. it is the weighted average of all the group-level $BGI_{2}$ of a country). The country-level $WGI_{2}$ refers to the average inequality level within all politically excluded ethnic groups of a country (i.e. it is the weighted average of all the group-level $WGI_{2}$ of a country). ***$p < .01$, **$p < .05$ and *$p < .1$. 

46