
Effects of Ethnic Voting and Inequality on Democracy

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Abstract

Ethnic voting and horizontal inequalities are widely considered detrimental to democracy as they reinforce ethnic divisions, make election results more predictable, incentivize electoral violence and patronage politics. Moreover, they lead to ethnic outbidding. While previous studies have analyzed ethnic voting and inequality separately, they have largely overlooked their interaction, leaving an important gap in understanding their combined effect on democratic quality. This study addresses this gap by investigating whether the negative impact of ethnic voting on democracy is moderated by horizontal inequality, offering a more nuanced perspective on the relationship between ethnic based voting and democratic stability. Using data from 58 countries, and a range of Tobit and OLS regression models, this article analyzes the interaction between ethnic voting and horizontal inequalities and their effect on democracy. The results confirm that both ethnic voting and horizontal inequalities individually harm democracy but unexpectedly suggest that at higher levels of horizontal inequality, ethnic voting may have a stabilizing effect. These findings challenge existing theoretical assumptions as well as the Lijphart-Horowitz dichotomy and highlight the need for a more contextualized approach to understanding ethnic voting and democracy.

Key words: *ethnic voting, horizontal inequality, democracy, ethnic conflict, ethnic diversity*



Introduction

Most armed conflicts since the Second World War happen along ethnic lines (Denny & Walter, 2014). Ethnicity has therefore become a major research topic in understanding conflict, with much attention being paid to the political relevance or salience of ethnic identity. Ethnic salience, however, is rather difficult to conceptualize empirically, yet one approach is politicized ethnicity in voting patterns. Electoral politics can precede or coincide with ethnic violence, making them a valuable part of peace and conflict research. Therefore, this paper will examine the question: *How does politicized ethnicity in the form of ethnic voting and horizontal inequalities affect democracy?*

There is extensive literature that asserts that politicized ethnicity is harmful to democracy (Chandra, 2005; Dowd & Driessen, 2008; Horowitz, 2000; Houle, 2018). Scholars have accordingly turned their attention to the underlying causes of politicized ethnicity, one of which is believed to be inequality between ethnic groups as it strengthens group identity (Bhavnani & Miodownik, 2009; Cederman & Wucherpfennig, 2017; Higashijima & Houle, 2018). There is further the assertion that inequality itself also has a negative impact on democracy, especially when it follows ascriptive lines such as ethnicity (Houle, 2015). Therefore, ethnic voting and inequality between ethnicities—both believed to be detrimental to democracy—are strongly linked to each other. To date, however, studies on the threats to democracy have only analyzed the effects of one of the two factors at a time.

Given how interconnected both ethnic voting and ethnic inequality are, this paper incorporates both into the theoretical framework on their impact on democracy. There are several established mechanisms on how ethnic voting can harm democracy, including increased predictability of election outcomes, higher electoral violence, stronger patronage politics, as well as ethnic outbidding (Chandra, 2005; Horowitz, 2000; Houle, 2018; Kuhn, 2015). Horizontal inequality is also detrimental to democracy, as it increases the likelihood of ethnic voting, as well

as creating strife and grievances, which strengthens the negative impact of ethnic voting on democracy (Houle, 2015). It is therefore essential to incorporate both in an empirical analysis to understand the effect of ethnicity on democracy.

To analyze the effect of both ethnic voting and horizontal inequality, I employ data on ethnic voting and democracy from Houle (2018), as well as data on horizontal inequality from V-Dem and Baldwin and Huber (2010). I run several regressions on the impact on democracy of ethnic voting and inequality and their interaction with each other. The analysis finds that both ethnic voting and horizontal inequality independently have a negative impact on democracy. However, the central finding is that, at higher levels of horizontal inequality, ethnic voting appears to have a positive effect on democracy, challenging the assumptions put forward by the theoretical argument. A possible explanation of this is that at high levels of horizontal inequality, the risk of conflict is increased, and ethnic voting mitigates this conflict in a non-violent way. The robustness of the empirical findings is limited, therefore further research is needed to confidently establish a causal relationship.

Nonetheless, this paper still represents a relevant contribution to the existing literature. It is consistent with the previous empirical findings that, in general, ethnic voting and horizontal inequalities are destructive to democracy and shows that the entire relationship is not as linear as previously assumed. Instead, the context of ethnic voting needs to be considered in order to understand its effect on democracy. Understanding structural challenges to democracy allows us to address them, create more resilient democratic systems, and prevent the outbreak of violent conflicts.

Literature

The initial academic disagreements on the impact of ethnic identity on politics stem from different assumptions about the nature of ethnic identities. In the primordialist understanding,



ethnic identity is fixed, “self-evident and timeless” (Chandra, 2012, p. 139), making ethnic diversity “an exogenously determined social state” (Ordeshook & Shvetsova, 1994, p. 108). Importantly, according to primordialism, “Ethnic groups are naturally political” (Fearon, 2008, p. 858), which has led to the “characterization of ethnic diversity as a problem” (Chandra, 2012, p. 2). In contrast, constructivism assumes ethnic identities to be social constructs and argues that “individuals have multiple ethnic identities that can change endogenously to political and economic processes” (Chandra, 2012, p. 4).

Primordialism has few proponents in contemporary academia, and the “constructivist approach to ethnicity is today virtually universally accepted” (Coakley, 2018; Weber et al., 2016, p. 3). However, primordialist assumptions are still common in other areas, such as public policy or the media (Chandra, 2012, p. 2). Most scholars agree that ethnic fractionalization itself does not have a relevant impact on politics, instead “ethnic and national identities derive their political significance from their relationship to the state” (Cederman & Girardin, 2007, p. 182), which is why contemporary studies focus on the process and nature of politicization of ethnicity (Chandra & Wilkinson, 2008; Montalvo & Reynal-Querol, 2005). There is still, however, disagreement about the causes and consequences of politicized ethnicity, as well as how to mitigate conflict based on ethnic identity.

The general problem of politicized ethnicity in electoral politics is that the ascriptive nature of ethnic identities creates “segmental cleavages,” which “challenges the assumptions of competitive politics” (Choudhry, 2008, p. 17). There are two contested approaches regarding how institutions can prevent this, centered around the works of Lijphart and Horowitz.

Lijphart’s approach is called ‘consociational democracy,’ which intends power-sharing between all ethnicities within a society through specific institutional arrangements and explicit political representation of every ethnicity in the form of a political party (Lijphart, 1977). By guaranteeing representation and preventing exclusion constitutionally, “groups will adopt peaceful as opposed to violent means for advanc-

ing their cause” (Huber, 2012, p. 1000). Another argument is that ethnic voting helps solidify new democracies, as ethnic divisions create an electoral cleavage, which generally has a stabilizing effect on democracies (Birnie, 2006, 2007).

In contrast, Horowitz (2000) argues that ethnicity should be depoliticized altogether by incentivizing broadly based political parties that advocate based on policy issues rather than identity, thereby preventing ethnic conflict. The discrepancy in approaches stems from a different understanding of the nature of ethnic salience in politics. Lijphart views ethnic salience as more static and generally high, focusing on the diffusion and management of group conflict, while Horowitz sees ethnic salience as the root cause of group conflict, viewing it as more fluid and advocating for its reduction. Regarding which electoral system is best for their purpose, Lijphart supports proportional representational systems (PR) as the cost of party formation is low, allowing every ethnicity to have a party representing their interests. In contrast, Horowitz advocates for majoritarian electoral law, in particular alternative vote, as it encourages cross-group cooperation (Horowitz, 2000; Lijphart, 1977).

This debate has spawned a number of studies, several of which have shown that PR is more effective in managing group conflict in divided societies, thus supporting Lijphart’s approach (Cohen, 1997; Saideman et al., 2002; Schneider & Wiesehomeier, 2008). Importantly, Huber (2012) found that PR voting systems are successful in managing group conflict because they actually lead to less politicization of ethnicity, and concluded “that if one accepts the Horowitz argument that the goal should be to depoliticize ethnicity in elections, one should adopt the electoral institutions advocated by Lijphart” (Huber, 2012, p. 1000).

Furthermore, employing the same measures of ethnic voting as Huber (2012), Houle (2018) found that ethnic voting is associated with weaker democracy. This supports Horowitz’s argument that ethnic salience in politics is detrimental to democracy, which renders democratic institutions more sustainable if they incentivize its reduction.



Based on the understanding that ethnic salience is not fixed, a substantial body of literature has examined factors influencing ethnic salience beyond institutions, such as economic modernization (Gellner, 2008), violent conflict (Gibler et al., 2012; Glaurdić et al., 2023; Sambanis & Shayo, 2013; Shayo & Zussman, 2011), political mobilization (Fearon, 2008; Fearon & Laitin, 2000), polarization (Eifert et al., 2010), as well as relative group size (Posner, 2004). The most common, however, is inequality, with universal agreement that inequalities between ethnic groups—referred to as horizontal inequalities—increase the political salience of ethnic identities and make both political and violent conflict more likely (Bhavnani & Miodownik, 2009; Cederman & Wucherpfennig, 2017; Houle et al., 2019; Houle & Bodea, 2017).

This is because ethnicity and class are both political cleavages, which can be more or less salient. When they coincide, we speak of reinforcing cleavages, making both more salient. When they do not, they function as cross-cutting cleavages that mutually dilute each other's political salience (Gubler & Selway, 2012; Higashijima & Houle, 2018; Houle, 2015; Houle et al., 2019; Houle & Bodea, 2017; Lipset & Rokkan, 1967; Selway, 2011; Siroky & Hechter, 2016).

Building on the established assumptions that horizontal inequalities increase ethnic salience and thereby ethnic voting (Horowitz & Klaus, 2020; Houle et al., 2019; Stewart & McGauvran, 2019), and that ethnic voting is considered to be harmful to democracy (Dowd & Driessen, 2008; Houle, 2018), this paper will examine the interaction between all three of these factors.

Theory

Politicization of Ethnicity

As mentioned above, the concept of ethnic identity is contested and subjective, often based on common language, religion, history, territory, or a combination of these. However, the most relevant factor is typically descent (Chandra, 2006; Fearon, 2008), as well as a common acknowledgment of ethnic differences (Weber et

al., 2016). This paper is based on the assumption from the literature that the salience of ethnic identity in politics is not fixed but varies. Several studies have already established that it is the politicization of ethnicity, rather than ethnic diversity itself, that leads to ethnic-based politics and ethnic conflict (Cederman & Girardin, 2007; Chandra & Wilkinson, 2008; Weber et al., 2016).

In the processes of politicization of ethnicity, the role of political elites and organizations is considered to be crucial, which intentionally politicize ethnicity for political gain. This is because mobilizing ethnicities as support bases are considered to be more robust and lower in cost (Weber et al., 2016). Ethnic salience describes the relevance of ethnic identity in politics, whereas mobilization is an intentional process and both can be mutually reinforcing. When ethnicity is mobilized in electoral politics, it is referred to as ethnic voting.

Ethnic voting is conceptualized as whether electoral decisions follow ethnic lines. Therefore, an 'ethnic party' is a political party whose support base is an ethnic group, regardless of whether it openly advertises itself as such (Chandra, 2011; Gadjanova, 2013).

The simplest case of ethnic voting occurs when there is one party for each group, and each party captures the exact vote of its corresponding group. However, this is rarely the case, which is why Huber (2012) distinguishes between two different forms of ethnic voting. The first is the group-level approach, which measures how strongly different groups vote for different parties, in the sense that an individual's voting choice can be predicted based on their ethnicity. In such a case, there are more groups than political parties, with parties drawing support from members of several groups. Their support bases in relation to other parties are, however, ethnically distinct, and voting cohesion among groups is high. The other measure is party-based ethnicization, in which a group splits its support among several parties, but each of these parties draws support only from members of a particular group. In this case, there are more parties than ethnic groups and an individual's ethnicity can be predicted based on their voting choice. Here,



voting cohesion within ethnic groups is low, but ethnic cohesion within the parties is high (Huber, 2012). Both measures are distinct but correlated and both are included in the measurement.

It is important to stress that ethnic voting is not binary; there is no pure ethnic voting nor is there an absence of identity-based electoral politics. Rather, it exists on a spectrum (Weber et al., 2016). However, the amount of ethnic voting can be quantified, and stronger levels of ethnic voting are associated with weaker democracy (Dowd & Driessen, 2008; Horowitz, 2000; Houle, 2018).

Ethnic Inequality and Ethnic Voting

Voting along an ethnic cleavage is especially strong when reinforced by a class cleavage, and becomes weaker when class is a cross-cutting cleavage (Gubler & Selway, 2012; Gurr, 1993; Houle et al., 2019). Horizontal inequalities between ethnic groups make ethnicity more salient, which in turn makes the mobilization of ethnicity even more low-cost than described before (Weber et al., 2016, p. 15). Moreover, the grievances created by this inequality increase the destructive potential of ethnic voting for democracy (Houle, 2015; Houle & Bodea, 2017; Huber & Suryanarayan, 2016).

Therefore, horizontal inequalities between ethnic groups predict ethnic salience and ethnic voting, as different ethnicities have different policy preferences (Houle et al., 2019; Huber & Suryanarayan, 2016). These inequalities also create distributional conflict and in more extreme cases can lead to rent-seeking behaviors where access to resources becomes a zero-sum game (Easterly & Levine, 1997).

Horizontal inequalities can be either political or economic in nature. This paper focuses on economic inequalities, as their relationship to ethnic voting has already been established (Houle et al., 2019), while the relationship between political inequalities and ethnic voting is more complex. Political inequality might lead to the political exclusion of ethnic groups from the electoral process through different mechanisms. In such cases, it is hard to speak of ethnic voting, since ethnic politics has to manifest itself

outside of electoral politics, such as coups, riots, or civil wars (Cederman & Wucherpfennig, 2017). More importantly, a political system that excludes part of the electorate from the political process based on ethnicity typically does not meet standard definitions of democracy (Dahl, 2020) and is therefore excluded from this analysis.

Although horizontal inequality is one of the main determinants of ethnic salience, it is not the only one, as other factors also contribute to the politicization of ethnicity, inter alia the electoral system (Huber, 2012), other institutional arrangements (Lieberman & Singh, 2012), and group size (Posner, 2004), all of which will be controlled for in the analysis.

Ethnic Voting and Democracy

There are at least four relevant causal mechanisms potentially explaining how ethnic voting harms democracy. These are not mutually exclusive, and this paper cannot establish which of these mechanisms is operative in any given case.

Firstly, as elections follow ascriptive lines of the population, outcomes become more predictable. In extreme cases, this has even been described as elections resembling a census (Choudhry, 2008; Ferree, 2006; Horowitz, 2000; Weber et al., 2016). This predictability leads to the emergence of “permanent majorities and permanent minorities” (Houle, 2018, p. 826), where the losers of such a system have little incentive to support the electoral process. Minorities may lose faith in the legitimacy of the electoral process, increasing the likelihood of extra constitutional actions such as coups or rebellions (Houle, 2018).

Secondly, if election results are more predictable, parties cannot gain votes from other groups but rather have to influence voter turnout (Horowitz, 2000). Parties will try to mobilize as many members of their support group as possible, but they will also try to lower the turnout of the other group through electoral violence (Berenschot, 2020; Kuhn, 2015; Nellis et al., 2016). A high degree of electoral violence undermines democratic practice and elections, while



also eroding trust and suppressing free speech (Birch et al., 2020).

Thirdly, ethnic voting incentivizes parties to engage in stronger patronage politics. This dynamic is connected to the previous two points, wherein patronage networks are used to mobilize more voters to the polls (Chandra, 2007) and supporters to engage in violence (Berenschot, 2020). Ruling coalitions based on ethnic support groups are incentivized to distribute public goods to supporting groups over non-supporting groups. Therefore, the cost of electoral defeat is much higher as it also means exclusion from public goods. This situation also increases the likelihood of incumbents not recognizing defeat in an election which can lead to coups and civil wars (Houle, 2018).

The fourth mechanism through which ethnic voting undermines democracy is called ethnic outbidding. When ethnic voting is prevalent, parties have little incentive to compete for votes outside of their own ethnicity, but they still compete for votes within their ethnic group, as there are often several parties or candidates from the same group participating in elections. These compete for the votes of a single ethnic group, creating incentives to outbid each other with stronger demands, more aggressive rhetoric, and less willingness to reconcile with other groups. This, in turn, prompts parties representing other groups to adopt more radical positions to counter the others, making the process self-enforcing. Therefore, “the emergence of even a single ethnic party ‘infects’ the rest of the party system, leading to a spiral of extreme bids that destroy competitive politics altogether” (Chandra, 2005, p. 235). Such systems are referred to as centrifugal systems, which lead to more polarized and contentious politics, making democratic breakdown more likely (Chandra, 2005; Horowitz, 2000; Houle, 2018; Reilly, 2001). All four mechanisms—potentially more—can work simultaneously, usually reinforcing each other, eroding and destabilizing democracy, and creating incentives to overthrow it via coups or rebellion.

In the context of this theoretical framework

the following hypothesis is tested in the research portion of the paper:

The stronger ethnic voting and horizontal inequalities, the greater the negative impact on democratic quality. Horizontal inequalities moderate the relationship between ethnic voting and democracy, such that higher levels of inequality strengthen the negative relationship between ethnic voting and democracy.

This is because horizontal inequalities make ethnicity more salient, and in turn decrease the cost of mobilizing ethnic identities. Therefore, ethnic voting is more likely. Additional grievances and distributional conflict increase the negative effect on democracy.

There are, however, two endogeneity problems at hand. Firstly, ethnic voting can be more prevalent depending on the institutional arrangements of a political system. While institutions are not a perfect predictor, they do have a substantial influence. The issue arises because certain institutional arrangements incentivize ethnic voting, with these very institutional arrangements also serving as indicators of the quality of democracy, creating a problem of reverse causality in the empirical strategy.¹ I account for this by controlling for the level of democracy in the previous year, as well as the voting system and federalism. While this approach accounts for the endogeneity problem, it cannot fully resolve it.

The second endogeneity problem is that the relationship between ethnic voting and horizontal inequality can be mutually self-reinforcing. Not only do horizontal inequalities politicize ethnicity, but high ethnic voting can also exacerbate horizontal inequalities. This occurs because parties are more likely to engage in patronage politics, where ruling parties are incentivized to distribute public goods to their support groups at the expense of others, thereby deepening horizontal inequality (De Luca et al., 2018; Huber, 2017). Therefore, it is important to take

¹“If institutions structure cleavages, then ethnic cleavages are in themselves just a proximate variable to explain the stability of democratic regimes” (Chandra 2005, p. 246).



into account that horizontal inequalities do not entirely forego ethnic voting, although much of the literature views horizontal inequalities as a cause of ethnic voting (Houle et al., 2019; Huber & Suryanarayan, 2016; Stewart & McGavran, 2019). To address this, the ethnic voting measures are lagged, indicating the score from the previous year. However, this paper can only confidently establish an association between the variables of interest.

Research Design

Data

The main dataset is a replication of Houle (2018),² which covers 58 countries in a time frame from 1992 to 2015, consisting of a total of 785 cases, with the unit of analysis being country-year. Since the study focuses on the impact on democracy, only countries that are considered democratic in a given year, defined as having a Polity score of six or higher, are included. In autocracies and anocracies, there is much variation in the quality of elections and whether they are free and fair, which impedes cross-country comparisons and justifies their exclusion from the analysis. The countries and years covered are listed in Table 2 in the appendix. For additional variables, V-Dem and the replication dataset for Baldwin and Huber (2010) are used.

Dependent Variable

For the dependent variable, the quality of democracy, the Polity2 score, as well as a V-Dem indicator, are utilized. The Polity score ranges from -10 to 10, with 10 indicating the highest democracy degree. The variable has been normalized to range from 0 to 1, with 1 indicating the highest degree of democracy.

When appropriate, the model will also use a lagged dependent variable. Since there is little variation in the democracy score within the country over time, and changes tend to occur slowly, the lagged dependent variable (i.e. the

democracy score in the previous year), will help control for this effect. Additionally, the lagged dependent variable also controls for the aforementioned possibility where a lower democracy score leads to ethnic voting, by controlling for the democracy score in previous years and therefore isolating the effect of ethnic voting.

As an alternative democracy indicator, the V-Dem indicator for electoral democracy, “v2x_polyarchy,” is used. Ranging from 0 to 1, higher values on this variable indicate better democratic quality.

Independent Variables

The model will use Huber’s (2012) measure for ethnic voting, which is calculated using survey data from the Afrobarometer, CSES, Latinobarometer, and WVS, using questions asking for the respondent’s ethnicity and voting behavior. Some surveys ask about vote intention for the next election, others about actual vote behavior in the last election, and others inquire about party affiliation. This variation means that strategic voting is not directly accounted for, so dummy control variables for the surveys are included to account for potential differences.

As mentioned before, ethnicity is conceptualized as a social construct, and each individual potentially has several identities. Therefore, only politically relevant ethnic groups are considered. They are identified using the Ethnic Power Relations dataset, and countries that are coded as ethnically homogenous are excluded from the dataset.

As previously discussed, there are two ways in which ethnic voting can manifest, either at a group level or at a party level. The group-level measure reflects cohesion within group voting behavior. For example, 89% of Hindu voters in Bangladesh support the Awami League, therefore group level ethnic voting is high (Huber, 2012). However, the Awami League is supported by both Hindus and Muslims, so the level of ethnic voting at the party level is comparatively low. In contrast, in Belgium, there is an ethnic cleavage between the French-speaking and

²As the data in this paper is replication data for Houle (2018) Table 4 in the appendix is a replication of his analysis, illustrating the negative association between ethnic voting and democracy.



Dutch-speaking populations, with multiple political parties representing each group. However, any given party is mostly supported by one of the two groups. Since the groups split their vote among several parties, group voting cohesion is low, whereas party support group cohesion is high. Therefore, knowing which party an individual supports gives us rather reliable information about their group membership in Belgium, whereas in Bangladesh, when knowing that a voter supports the Awami League, we cannot predict their group membership. Knowing however that a Bengali voter is Hindu gives rather reliable information about their vote choice, whereas knowing that a Belgian voter is French speaking is not sufficient in predicting their vote choice. Both mechanisms are not mutually exclusive, one of the two in any given state is higher than the other but they are still strongly correlated.

Further, the literature differs on the impact of the number of groups on democracy. One assumption is that a higher number of different groups is an outcome driver, under which the Ethno-Linguistic Fractionalization Index (ELF) is used (Alesina et al., 2003; Easterly & Levine, 1997). The opposing view suggests that when many small groups exist, power and resources become too dispersed among them, making effective mobilization unlikely. Instead, the driver of outcome is the size of the groups, as well as their relative size to each other, with the highest assumed risk for conflict when there are only two groups of equal size (Horowitz, 2000). Under this assumption, the Ethnic Polarization measure (EP) is used (Montalvo & Reynal-Querol, 2005). As groups become more equal in size, both measures increase. The ELF rises with a higher number of groups, whereas EP declines.

Both fractionalization and polarization measures are utilized for both the group-level and party-level ethnicization, resulting in total of four measures of ethnic voting: Group Voting Fractionalization (GVF), Group Voting Polarization (GVP), Party Voting Fractionalization (PVF), and Party Voting Polarization (PVP).

The formulas for the ethnic voting measures are elaborated in the appendix. The four measures for ethnic voting are highly correlated, which is why four different models will be used to avoid multicollinearity and capture potential differences in ethnic voting based on their measurement.³

The other independent variable is horizontal inequality, for which two measures are used. The first is an indicator from V-Dem, which measures access to public goods by social group (v2peapssoc), which ranges from 0 to 4, with 4 representing equal access to public goods across social groups. I normalize the variable to range from 0 to 1 and reverse it, so that 1 indicates high horizontal inequality and 0 no inequality. A limitation of this variable is that, as mentioned before, ethnic voting might lead to intentionally unequal access to public goods, which introduces potential endogeneity. This is partially controlled for as the ethnic voting measures are lagged.

The second measure is from Baldwin and Huber (2010), who built a measure for Between-Group Inequality (BGI) based on income data from various surveys. The dataset is cross-sectional, measuring one year per country between 1996 and 2006. As horizontal inequalities tend to change slowly (Stewart, 2016), the BGI value for each country is merged with all cases from that country. However, as this dataset does not cover the exact same country selection as the main dataset, the analysis ends up with 442 cases when combined. This measurement is used to check the robustness of the main analysis.

Control Variables⁴

Several other factors may affect democratic quality and ethnic voting, which needed to be controlled for. Firstly, economic factors are included, so gross domestic product per capita (logged), its growth rate, and a dummy variable for oil exporters.⁵ Additionally, dummy variables are included for Western democracies and former British colonies, as well as variables

³Table 3 in the appendix shows the correlation coefficients of the four ethnic voting measures.

⁴All control variables are from Houle (2018).

⁵A country takes the value 1 if more than half of its exports are fossil fuels.



representing the proportion of a country's population that is Protestant Christian or Muslim.

As the literature has established, diversity itself is not considered to be a driver of outcome, but it will still be controlled for in terms of ethnic and religious fractionalization to account for differences in the number and size of the group (Posner, 2004).

The role of institutional arrangements is also considered to be very important for ethnic voting, but also for democratic quality itself. PR voting systems have been found to lead to less ethnic voting and will be included as a control as well as federalism (Huber, 2012).

I also control for countries that gained independence after 1945, as younger countries tend to have weaker institutions and therefore are less likely to be democratic. Further, there is a control that indicates the age of a country's democracy, as Birnir (2006) concluded that ethnic voting has a stabilizing effect in new democracies. Another control variable is the entire world's average Polity score in the given year, as well as the previously mentioned lagged dependent variable.

Lastly, there are dummy variables for different decades to control for temporal differences, along with survey control variables that account for different question wording across surveys (LB, AB, CSES).

Empirical strategy

The hypothesis is tested with several regression models. The Polity score is censored at -10 and 10, and in this case at 0 and 1 since it was normalized. There are no left-censored cases at 0 since that would correspond to a Polity score of -10, and only countries with a score of 6 or higher are included. There are however 255 out of 785 cases that are right-censored, which amounts to roughly a third of all cases. Therefore, OLS regressions are not suitable, and instead, Tobit models will be used (Epstein et al., 2006; Wooldridge, 2010). This is exacerbated by the use of the lagged dependent variable, as it is also censored. Thus, countries with a maximum Polity score in the previous year cannot gain a

higher democracy score, which would lead to an even more biased result with OLS models.

Additionally, I run the same regressions but with the V-Dem indicator for electoral democracy "v2x_polyarchy" as the dependent variable. OLS models are used for the second analysis as the dependent variable is not censored.

In this analysis, ethnic voting and horizontal inequality are both independent variables, and there is an interaction effect between the two to test the moderating effect. Previous studies suggest a negative association between ethnic voting and democracy, therefore the coefficient of ethnic voting should be negative in this analysis (Dowd & Driessen, 2008; Houle, 2018). Inequality is also associated with poorer democratic quality, and thus, its coefficient should also be negative (Houle, 2015). According to the hypothesis, the effect of ethnic voting and horizontal inequality should be amplified when interacting with each other, meaning that the coefficient of the interaction effect should be negative and stronger than the two individual effects.

Results and Discussion

Table 1 shows the results of the Tobit models with the V-Dem indicator for horizontal inequality. As expected, the coefficients of ethnic voting and horizontal inequality show a negative relationship with democratic quality, with both being statistically significant and the relationship between ethnic voting on democratic quality being stronger than that of horizontal inequality. Importantly, however, the interaction effect is positive and significant in three out of four regressions. This implies that the negative effect of higher ethnic voting on democracy is weaker as horizontal inequality rises, which goes against the assumptions made in the hypothesis. Instead, the model suggests that with higher horizontal inequality, the impact of ethnic voting on democracy is weaker, or possibly even positive. Therefore, the null hypothesis cannot be rejected. Among the control variables, only former British colonies, western democracies, and the world's average democracy score in a given year have a significant impact.



Table 1
The Effect of Ethnic Voting and Inequality on Democracy

DV: Polity Score				
	Model 1: GVF	Model 2: GVP	Model 3: PVF	Model 4: GVP
Intercept	-0.072 (0.055)	-0.065 (0.055)	-0.036 (0.055)	-0.074 (0.055)
Lagged DV	1.096*** (0.039)	1.097*** (0.039)	1.077*** (0.040)	1.105*** (0.039)
Ethnic Voting	-0.220*** (0.058)	-0.137*** (0.034)	-0.184*** (0.040)	-0.125* (0.051)
Horizontal Inequality	-0.053** (0.019)	-0.062** (0.020)	-0.070*** (0.019)	-0.043* (0.019)
EV * HI	0.322** (0.122)	0.244* (0.099)	0.364*** (0.101)	0.144 (0.105)
GDP p.c.	0.008+ (0.004)	0.007+ (0.004)	0.007+ (0.004)	0.007 (0.004)
GDP Growth	0.000 (0.001)	0.000 (0.001)	0.000 (0.000)	0.000 (0.001)
Oil	-0.022 (0.015)	-0.022 (0.015)	-0.026+ (0.015)	-0.020 (0.015)
Ethnic fractionalization	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)
Religious fractionalization	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)
Muslim	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)
Protestant	0.000 (0.000)	0.000+ (0.000)	0.000 (0.000)	0.000+ (0.000)
British colony	0.034** (0.012)	0.026* (0.010)	0.024* (0.011)	0.034** (0.011)
New country	0.006 (0.007)	0.005 (0.007)	0.006 (0.007)	0.004 (0.007)
PR	0.018+ (0.010)	0.016+ (0.009)	0.017+ (0.010)	0.017+ (0.010)
Federalism	-0.011+ (0.006)	-0.011 (0.006)	-0.012+ (0.006)	-0.008 (0.006)
Age of Democracy	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)
Western	0.065*** (0.015)	0.065*** (0.015)	0.077*** (0.017)	0.060*** (0.014)
World Democracy	-0.020** (0.007)	-0.020** (0.007)	-0.021** (0.007)	-0.019** (0.007)
LB	0.010 (0.008)	0.012 (0.008)	0.014+ (0.008)	0.010 (0.007)
AB	-0.001 (0.008)	-0.004 (0.008)	-0.003 (0.008)	0.000 (0.008)
CSES	-0.002 (0.006)	0.000 (0.006)	-0.001 (0.006)	-0.005 (0.006)
1990s	-0.024+ (0.014)	-0.024+ (0.014)	-0.024+ (0.014)	-0.023+ (0.014)
2000s	-0.008 (0.006)	-0.008 (0.006)	-0.008 (0.006)	-0.008 (0.006)
Num.Obs.	785	785	785	785

+p < 0.1, *p < 0.05, **p < 0.01, ***p < 0.001

Note. Tobit models, V-Dem “v2peapssoc” indicator for Horizontal Inequality, standard errors in parentheses.



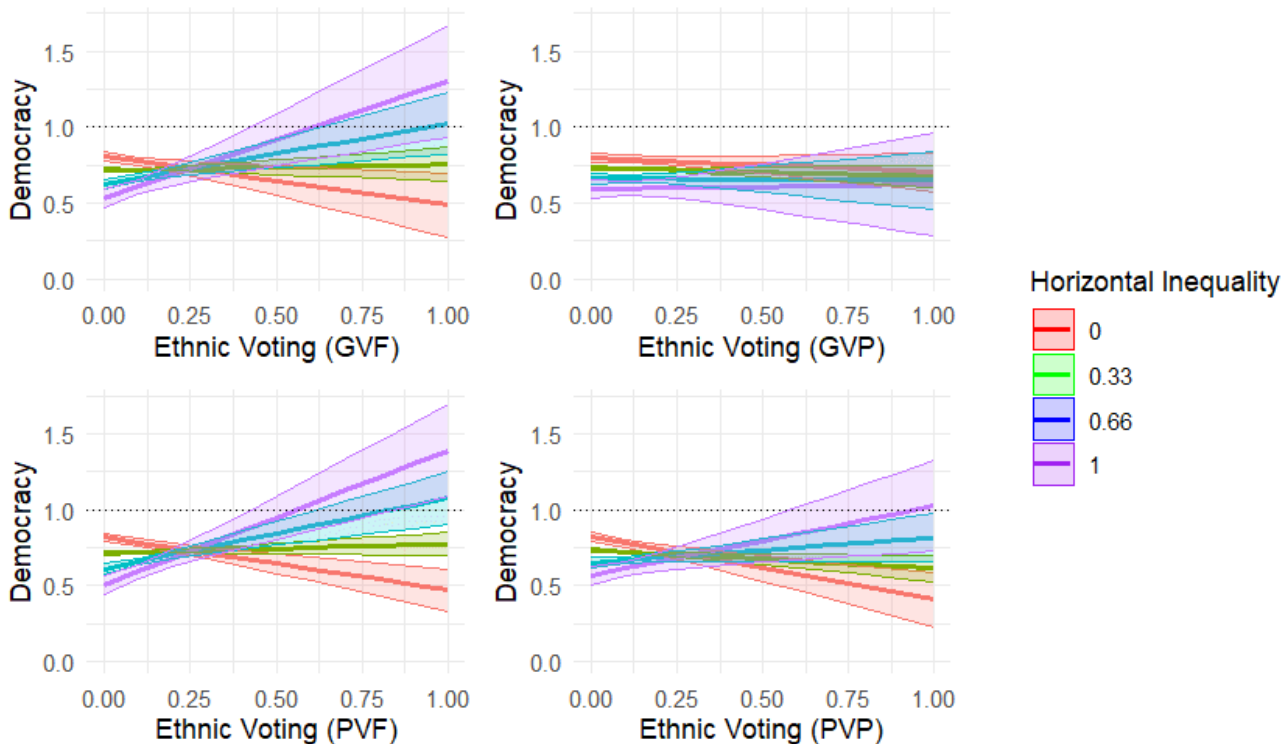
The second analysis uses the V-Dem indicator, `v2x_polyarchy`, as the dependent variable and can be found in Table 5 in the appendix. It is an OLS model because, unlike Polity, the dependent variable `v2x_polyarchy` is not censored and does not utilize a lagged dependent variable. In all models, the independent effects of ethnic voting and horizontal inequality are negative, as in the first analysis. The interaction effect is also positive, supporting the finding that with higher horizontal inequality, the effect of ethnic voting becomes positive. However, the coefficient for GVP as ethnic voting as well as the interaction effect with GVP are not significant in this analysis.

Due to the difficulty of visualizing the marginal effects of a Tobit model, I utilized the

four models of the second analysis in Table 5, as they are OLS regressions. Figure 1 shows the marginal effects of ethnic voting on democracy at different levels of horizontal inequality, using the V-Dem polyarchy score for democracy. The coefficients from the models had the same prefixes and significance as in Table 1 but were stronger. Since the results for Model 10 (GVP) were not significant, the corresponding graph is not interpreted. As the graph shows, when horizontal inequality equals zero, there is a negative relationship between ethnic voting and democracy, as indicated by the coefficients for ethnic voting in the regression tables. However, at high levels of horizontal inequality, higher levels of ethnic voting are associated with higher levels of democracy.

Figure 1
Model from Table 5

Marginal Effects of Ethnic Voting on Democracy by Horizontal Inequality



Note. All independent variables except ethnic voting and horizontal inequality are set to their mean. Shaded areas indicate 90% confidence intervals. All visualized variables range from 0 to 1, and the dotted line indicates the maximum range of the democracy indicator (`v2x_polyarchy`). The scale of the Y-axis has been increased to allow for full visualization of confidence intervals.

The confidence intervals are narrower at lower levels of ethnic voting and become wider as eth-

nic voting increases. This suggests more precise estimates when ethnic voting is lower, as well as



at lower values of horizontal inequality, where the confidence intervals are generally narrower. This is because there are fewer cases at high levels of ethnic voting and horizontal inequality. The highest observed value of any ethnic voting measure is 0.79 for PVP and the highest observed value of horizontal inequality is 0.84. Importantly, the confidence intervals for the different levels of horizontal inequality overlap significantly in the medium range of ethnic voting, and in some cases remain intersecting as ethnic voting increases. Generally, the overlapping and widening of the confidence intervals, especially at higher levels of ethnic voting, indicate uncertainty and limited statistical significance.

Implications

The literature has established that horizontal inequality is destructive for democracy, which has also been illustrated by the coefficients in Table 1 and Table 5. A driver for this is that grievances increase the likelihood of democratic breakdowns, via coups or civil war, but also generally through violence and social unrest. More broadly, horizontal inequalities increase ethnic salience and thereby politicize ethnicity as it creates grievances and a distributional conflict. This can manifest within the institutions of electoral politics or outside them, in the form of violence and democratic breakdown. The damage towards democracy is lower with ethnic voting, thereby, ethnic voting could be understood as mitigating the effect of ethnic salience by keeping the conflict within electoral politics.

This has important implications for the Horowitz-Lijphart debate. Lijphart's approach to managing ethnic conflicts through consociationalism accounts little for the fluctuation of ethnic salience, which has been widely criticized. In contrast, Horowitz argues for depoliticizing ethnicity altogether, a perspective that Lijphart takes little into account. The results of this study suggest that, in general, ethnic voting is harmful to democracy, which supports Horowitz's argument that politicized ethnicity is a central issue. However, in cases where ethnicity is already politically salient, in this case due

to inequality, ethnic voting can manage ethnic conflict. Lijphart's suggestions for conflict management were made under the assumption that ethnicity is inherently politically salient, which is not believed to be true. Nonetheless, his approach could still apply in situations where ethnicity actually is highly politically salient, especially when the causes for it like inequality substantially increase the risk of conflict emergence.

Robustness checks

To test the robustness of the findings, I employ an alternative measure for horizontal inequality from Baldwin and Huber (2010), as shown in Table 6 in the appendix. Two out of four coefficients for horizontal inequality show a weak, positive relationship with democratic quality, along with a negative interaction effect. These results are contrary to previous analyses. Importantly, none of the coefficients for the independent variables or the interaction effect are statistically significant across all four models. This might be in part due to the reduced sample size of 442 cases, but overall, this implies limited robustness of the main findings.

Furthermore, as there are potentially unobserved country-level differences, I conduct another robustness check to control for this. Table 7 in the appendix shows the models from Table 5 with country fixed effects. The coefficients for horizontal inequalities remain negative and significant, while the effect of ethnic voting becomes positive but insignificant, along with the interaction effect. The adjusted R-squared increases in Table 7 by approximately 50% compared to Table 5, indicating that the models with fixed effects explain more variation in the democratic quality. These results suggest that when controlling for unobserved country differences, the negative relationship between horizontal inequalities and democratic quality remains robust across countries, whereas the impact of ethnic voting and the interaction effect are not significant. A limitation of the fixed effects model and the data more generally is that the observed years for each country are not the same.

Finally, there is a problem of endogeneity that



stems from ethnic voting harming democracies, but ethnic voting itself potentially arising from institutional settings that are of lower democracy to begin with. To address this, I rerun the analysis from Table 5, and include a lagged dependent variable. The results are illustrated in Table 8 and show that when controlling for the democracy score in the previous year, the relationships between ethnic voting, horizontal inequalities, the interaction effect, and democratic quality become insignificant when using the V-Dem indicator as the dependent variable. It remains that the best predictor for a country's democracy score in a given year is the democracy score in the previous year. Still, it is important to keep in mind that the quality of democracy tends to change slowly, especially at higher levels of democracy, which is why the lagged dependent variable might not be the most suitable model in this context.

In general, the statistical strength of the findings is limited. There are endogeneity problems in the relationships between ethnic voting and horizontal inequalities, as well as between ethnic voting and quality of democracy, which were addressed but could not be fully resolved. The sample size is relatively small, and the analysis would be better with a larger number of countries and especially years, as well as an equivalent number of observations for every country. Additionally, there is possible sample bias, as only fully democratic countries are included, and therefore regime differences are unaccounted for. The main indicator for horizontal inequality, "v2peapssoc", indicates unequal access to public goods, which is more driven by endogeneity than an income-based measure of horizontal inequality, as public goods are controlled by ruling parties. The income-based indicator for horizontal inequality from Baldwin and Huber (2010) employed in Table 6 has a smaller number of cases, thereby reducing statistical significance. Moreover, this analysis does not address inequality within groups, a potential cross-cutting cleavage. Further, when controlling for unobserved country differences as well as the democracy score in the previous year, the results show little significance. In total, the analysis would benefit from a more comprehensive sample and operational-

ization of horizontal inequality.

Conclusions

The literature on the effects of ethnic voting has been contested due to differing understanding of ethnic salience in politics. The Lijphart-based argument suggests that ethnic voting can stabilize democracy by ensuring explicit representation for all ethnic groups, as ethnic salience is assumed to be static and generally high. In contrast, Horowitz views ethnic salience as more fluid and potentially harmful to democracy, advocating for the depoliticizing of ethnicity. Recent studies have favored the Horowitz-based approach and have validated that, generally, ethnic voting is detrimental to democracy. However, these studies have overlooked inequalities between ethnic groups, which are considered to be the main cause of the politicization of ethnicity.

To analyze the effects of ethnic voting and inequality on democracy, I ran several regression models with interaction effects. The findings are consistent with previous research, showing that ethnic voting and horizontal inequality decrease democracy over time. However, the main finding of this analysis is that as horizontal inequality rises, the negative impact of ethnic voting on democracy decreases. At high levels of inequality, higher ethnic voting is even predicted to have a positive impact on democracy. A possible explanation for this is that inequality between ethnic groups increases conflict potential, which is managed non-violently through ethnic voting, thereby stabilizing democracy in cases where conflict potential is high. This would indicate that Horowitz, in general, is correct in advocating for the depoliticization of ethnicity, whereas Lijphart's support for ethnic voting is correct when ethnicity is already highly political, which was the underlying assumption of his argument to begin with. It is also important to keep in mind that in situations where ethnic voting is not necessarily harmful to democracy, the underlying circumstances, as in horizontal inequality, remain detrimental to democracy, which is why Horowitz's general assertion is not challenged, but rather validated by this



paper.

The findings of the analysis are not shown to be robust when using different inequality indicators or controlling for country differences and past democracy scores. Additionally, due to the limited data and endogeneity concerns—although addressed, they could not be fully accounted for—this paper cannot fully establish a causal relationship between the variables of interest. Therefore, future research should validate these findings with a larger sample that encompasses more countries over a

longer time period. Further research could also explore more specific forms of political salience, such as public discourse, as well as investigate the mechanisms and relevance of elite mobilization.

This paper does not prove that ethnic voting is necessarily detrimental to democracy but rather the underlying politicized ethnicity is. Therefore, in order to reinforce democracy, policies and constitutional design should not only focus on reducing ethnic voting but also the underlying causes of it.

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Appendix C: Effects of Ethnic Voting and Inequality on Democracy by Felix Bergstein**Appendix C: Table 2***Countries and Years covered by the Analysis*

Country	First Year	Last Year	Country	First Year	Last Year
Argentina	2002	2015	Russia	2001	2007
Australia	1996	2015	Senegal	2003	2015
Bangladesh	1997	2007	Slovakia	1999	2015
Belgium	2000	2015	Slovenia	1997	2015
Benin	2006	2015	South Africa	1997	2015
Brazil	2002	2015	Spain	1992	2015
Bulgaria	1998	2015	Switzerland	1992	2015
Burundi	2013	2015	Taiwan	1996	2009
Canada	1998	2015	Turkey	2008	2014
Chile	1997	2015	Ukraine	1997	2014
Colombia	1999	2015	United Kingdom	1998	2015
Costa Rica	2002	2015	United States	1996	2015
Croatia	2008	2015	Uruguay	2002	2015
Ecuador	2002	2007	Venezuela	1997	2006
Estonia	1997	2015	Zambia	2009	2015
Finland	1997	2015	Senegal	2003	2015
Georgia	2005	2015	Slovakia	1999	2015
Ghana	2002	2015	Slovenia	1997	2015
Guatemala	2002	2015	South Africa	1997	2015
Hungary	2003	2015	Spain	1992	2015
India	1996	2015	Switzerland	1992	2015
Indonesia	2002	2015	Taiwan	1996	2009
Iraq	2015	2015	Turkey	2008	2014
Kenya	2004	2015	Ukraine	1997	2014
Kyrgyzstan	2012	2015	United Kingdom	1998	2015
Latvia	1997	2015	United States	1996	2015
Liberia	2009	2015	Uruguay	2002	2015
Macedonia	1999	2015	Venezuela	1997	2006
Madagascar	2006	2015	Zambia	2009	2015
Malawi	2000	2015	Senegal	2003	2015
Malaysia	2012	2014	Slovakia	1999	2015
Mali	2006	2012	Slovenia	1997	2015
Mexico	1998	2015	South Africa	1997	2015
Moldova	1997	2015	Spain	1992	2015
Namibia	2000	2015	Switzerland	1992	2015
New Zealand	1997	2015	Taiwan	1996	2009
Nicaragua	2002	2015	Turkey	2008	2014
Niger	2014	2015	Ukraine	1997	2014
Pakistan	2011	2015			
Panama	2002	2015			
Paraguay	2002	2015			
Peru	2002	2015			
Romania	1997	2015			

Appendix C: Ethnic voting measures formulas

Firstly, the electoral distance is measured between groups and parties respectively. The Group based measure is denoted as $\bar{r}_{i,j}$, the party-based measure as $\tilde{r}_{i,j}$.

$$\bar{r}_{i,j} = \sqrt{\frac{1}{2} \sum_{k=1}^P (V_k^i - V_k^j)^2}$$

$$\tilde{r}_{i,j} = \sqrt{\frac{1}{2} \sum_{g=1}^G (P_g^i - P_g^j)^2}$$

In the group-based measure, i and j indicate two ethnic groups, and V_i^k and V_j^k the proportion of members of i and j that support party k , with a total of P parties. In the party-based measure, i and j indicate two parties, and P_g^i and P_g^j the proportion of voters of i and j that are members of group g , with a total of G ethnic groups.

With this, Huber (2012) creates the following four measures of ethnic voting:

Group Voting Fractionalization (GVF) is the group-level ethnicization and fractionalization approach, and **Group Voting Polarization (GVP)** is the group-level ethnicization and polarization approach:

$$GVF = \sum_{i=1}^G s_i s_j \bar{r}_{ij} \quad GVP = 4 \sum_{i=1}^G s_i s_j \tilde{r}_{ij}$$

With a total amount of G groups and s_i and s_j indicating the size of groups i and j . GVF approaches 1 when the electoral distance between groups is 1 for all combinations of groups, groups are equally large, and the number of groups rises. GVP approaches 1 when the electoral distance between groups is 1 and there are two equally large groups.

Party Voting Fractionalization (PVF) is the party-level ethnicization and fractionalization approach, and **Party Voting Polarization (PVP)** is the party-level ethnicization and polarization approach:

$$PVF = \sum_{i=1}^P p_i p_j \bar{r}_{i,j} \quad PVP = 4 \sum_{i=1}^P p_i p_j \tilde{r}_{i,j}$$

With a total of P parties, p_i and p_j indicate the vote shares of parties i and j . PVF approaches 1 when the electoral distance between parties is 1 for all combinations of parties, parties have equal vote shares, and the number of parties increases. PVP approaches 1 when the electoral distance between parties is 1 and there are two equally large parties.

Table 3 illustrates that the four ethnic voting measures are highly correlated and therefore each warrants separate models for every analysis to avoid multicollinearity. Table 4 shows the results of the replication of the main analysis of Houle (2018), which has the same results as the original analysis, validating his findings. The models in Table 5 are the second analysis, which reruns the models from Table 1 but with the `v2x_polyarchy` as the dependent variable and without a lagged dependent variable. As the dependent variable in this case is not censored, the models in Table 5 use OLS regressions. Table 6 shows the same models as Table 1 but with the indicator for horizontal inequality from Baldwin and Huber (2010). Tobit models do not allow for the calculation of R-squared and adjusted R-squared and therefore the corresponding tables cannot include any. Table 7 adds country fixed effects to the models from Table 5, which is why the intercept is omitted. Table 8 adds a lagged dependent variable to the models from Table 5, which is why the number of observations decreases to 727, as the first recorded year for every country is omitted as there are no previous observations to base the lagged dependent variable on.

Appendix C: Table 3
Correlation of Ethnic Voting Measures

	GVF	GVP	PVF	PVP
GVF	1			
GVP	0.8168	1		
PVF	0.8552	0.8388	1	
PVP	0.9055	0.7409	0.7913	1

Appendix C: Table 4
The Effect of Ethnic Voting on Democracy (Houle 2018)

DV: Polity Score

	Model 5: GVF	Model 6: GVP	Model 7: PVF	Model 8: PVP
Intercept	-0.132** (0.049)	-0.130** (0.049)	-0.124* (0.049)	-0.128** (0.049)
Lagged DV	1.123*** (0.038)	1.100*** (0.038)	1.124*** (0.038)	1.118*** (0.038)
Ethnic voting	-0.098** (0.031)	-0.069*** (0.019)	-0.064** (0.021)	-0.070** (0.026)
GDP per capita	0.009* (0.004)	0.012** (0.004)	0.009* (0.004)	0.009* (0.004)
GDP Growth	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)
Oil	-0.014 (0.014)	-0.012 (0.014)	-0.017 (0.014)	-0.013 (0.014)
Ethnic frac.	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)
Religious frac.	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)
Muslim	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)
Protestant	0.000* (0.000)	0.000 (0.000)	0.000+ (0.000)	0.000* (0.000)
British colony	0.045*** (0.011)	0.035*** (0.010)	0.037*** (0.010)	0.040*** (0.011)
New country	0.008 (0.005)	0.009+ (0.005)	0.010+ (0.006)	0.008 (0.005)
PR	0.023* (0.009)	0.021* (0.009)	0.024* (0.009)	0.023* (0.009)
Federalism	-0.009 (0.006)	-0.012+ (0.006)	-0.006 (0.006)	-0.007 (0.006)
Age of democracy	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)
Western	0.057*** (0.013)	0.063*** (0.014)	0.061*** (0.014)	0.059*** (0.014)
World democracy	-0.021** (0.007)	-0.021** (0.007)	-0.022** (0.007)	-0.020** (0.007)
LB	0.004 (0.007)	0.005 (0.007)	0.005 (0.007)	0.007 (0.007)
AB	0.005 (0.008)	0.003 (0.008)	0.001 (0.008)	0.006 (0.008)
CSES	-0.005 (0.006)	-0.003 (0.006)	-0.005 (0.006)	-0.005 (0.006)
1990s	-0.024+ (0.014)	-0.025+ (0.014)	-0.025+ (0.014)	-0.024+ (0.014)
2000s	-0.009 (0.006)	-0.009 (0.006)	-0.009 (0.006)	-0.008 (0.006)
Observations	785	785	785	785

+p < 0.1, *p < 0.05, **p < 0.01, ***p < 0.001

Note. Tobit models, standard errors in parentheses.

Appendix C: Table 5
The Effect of Ethnic Voting and Inequality on Democracy

DV: V2X Polyarchy

	Model 9: GVF	Model 10: GVP	Model 11: PVF	Model 12: PVP
Intercept	0.203* (0.101)	0.174+ (0.103)	0.213* (0.100)	0.164 (0.101)
Ethnic Voting	-0.321** (0.114)	-0.099 (0.070)	-0.346*** (0.076)	-0.411*** (0.097)
Horizontal Inequality	-0.244*** (0.037)	-0.185*** (0.041)	-0.277*** (0.037)	-0.223*** (0.037)
EV * HI	0.965*** (0.254)	0.114 (0.219)	1.090*** (0.200)	0.771*** (0.214)
GDP p.c.	0.085*** (0.009)	0.087*** (0.009)	0.086*** (0.009)	0.088*** (0.009)
GDP Growth	0.000 (0.001)	-0.001 (0.001)	0.000 (0.001)	-0.001 (0.001)
Oil	-0.250*** (0.033)	-0.245*** (0.034)	-0.250*** (0.033)	-0.251*** (0.033)
Ethnic fractionalization	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)
Religious fractionalization	-0.002*** (0.000)	-0.002*** (0.000)	-0.002*** (0.000)	-0.002*** (0.000)
Muslim	-0.001*** (0.000)	-0.001*** (0.000)	-0.001*** (0.000)	-0.001*** (0.000)
Protestant	0.000 (0.000)	0.001* (0.000)	0.000 (0.000)	0.000 (0.000)
British colony	-0.058* (0.023)	-0.019 (0.021)	-0.062** (0.021)	-0.030 (0.021)
New country	-0.011 (0.014)	-0.016 (0.014)	-0.011 (0.014)	-0.001 (0.015)
PR	-0.029+ (0.016)	-0.024 (0.016)	-0.026 (0.016)	-0.022 (0.016)
Federalism	-0.017 (0.012)	-0.017 (0.013)	-0.026* (0.013)	-0.016 (0.012)
Age of Democracy	0.001*** (0.000)	0.001*** (0.000)	0.001*** (0.000)	0.001*** (0.000)
Western	-0.022 (0.019)	-0.042* (0.019)	-0.014 (0.019)	-0.027 (0.019)
World Democracy	-0.023 (0.015)	-0.022 (0.015)	-0.027+ (0.014)	-0.023 (0.015)
LB	-0.029+ (0.016)	-0.052** (0.016)	-0.024 (0.016)	-0.043** (0.016)
AB	0.062*** (0.018)	0.062*** (0.018)	0.073*** (0.018)	0.067*** (0.018)
CSES	-0.010 (0.011)	-0.018 (0.011)	-0.007 (0.011)	-0.017 (0.011)
1990s	0.007 (0.028)	0.008 (0.028)	0.006 (0.027)	0.006 (0.027)
2000s	0.011 (0.012)	0.012 (0.012)	0.011 (0.012)	0.012 (0.012)
R^2	0.603	0.597	0.610	0.604
Adj. R^2	0.591	0.585	0.599	0.593
Observations	785	785	785	785

+p < 0.1, *p < 0.05, **p < 0.01, ***p < 0.001

Note. OLS models. V-Dem “v2peapssoc” indicator used for Horizontal Inequality. Standard errors in parentheses.

Appendix C: Table 6*The Effect of Ethnic Voting on Democracy, alternative Inequality measure***DV: Polity Score**

	Model 13: GVF	Model 14: GVP	Model 15: PVF	Model 16: PVP
Intercept	-0.240** (0.086)	-0.249** (0.089)	-0.263** (0.087)	-0.246** (0.086)
Lagged DV	1.152*** (0.065)	1.131*** (0.064)	1.158*** (0.064)	1.153*** (0.063)
Ethnic Voting	-0.177+ (0.097)	-0.134 (0.085)	-0.106 (0.071)	-0.074 (0.079)
Horizontal Inequality	-0.010 (0.021)	-0.008 (0.030)	0.003 (0.023)	0.007 (0.021)
EV * HI	0.091 (0.152)	0.055 (0.190)	-0.001 (0.133)	-0.045 (0.130)
GDP p.c.	0.025** (0.009)	0.029** (0.009)	0.026** (0.009)	0.025** (0.008)
GDP Growth	0.000 (0.001)	0.000 (0.001)	0.000 (0.001)	0.000 (0.001)
Oil	-0.032 (0.020)	-0.031 (0.020)	-0.035+ (0.020)	-0.030 (0.020)
Ethnic fractionalization	0.000 (0.000)	-0.001 (0.000)	0.000 (0.000)	0.000 (0.000)
Religious fractionalization	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)
Muslim	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)
Protestant	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)
British colony	0.058** (0.020)	0.046** (0.017)	0.054** (0.018)	0.044** (0.017)
New country	0.042*** (0.013)	0.044*** (0.013)	0.050*** (0.013)	0.045*** (0.013)
PR	0.035** (0.013)	0.031* (0.013)	0.038** (0.014)	0.030* (0.013)
Federalism	0.003 (0.011)	-0.003 (0.012)	0.006 (0.011)	0.004 (0.011)
Age of Democracy	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)
Western	0.065* (0.025)	0.075** (0.028)	0.068* (0.026)	0.065** (0.025)
World Democracy	-0.040*** (0.012)	-0.040*** (0.012)	-0.038** (0.012)	-0.039** (0.012)
LB	0.024+ (0.014)	0.022 (0.014)	0.019 (0.014)	0.025+ (0.014)
AB	0.036* (0.015)	0.034* (0.015)	0.029+ (0.015)	0.035* (0.015)
CSES	-0.005 (0.011)	-0.006 (0.011)	-0.004 (0.011)	-0.002 (0.010)
1990s	-0.037+ (0.020)	-0.037+ (0.020)	-0.036+ (0.020)	-0.036+ (0.020)
2000s	-0.012 (0.009)	-0.012 (0.009)	-0.011 (0.009)	-0.012 (0.009)
Num. Obs.	442	442	442	442

+p < 0.1, *p < 0.05, **p < 0.01, ***p < 0.001

Note. Tobit models, Baldwin & Huber (2010) indicator for Horizontal Inequality, standard errors in parentheses.

Appendix C: Table 7*The Effect of Ethnic Voting and Inequality on Democracy, Fixed effects model***DV: V2X Polyarchy**

	Model 17: GVF	Model 18: GVP	Model 19: PVF	Model 20: PVP
Ethnic Voting	0.042 (0.177)	0.058 (0.093)	0.004 (0.130)	0.198+ (0.108)
Horizontal Inequality	-0.280*** (0.079)	-0.298*** (0.079)	-0.253** (0.082)	-0.202* (0.078)
EV * HI	0.193 (0.364)	0.189 (0.218)	-0.023 (0.279)	-0.399 (0.274)
GDP p.c.	0.036+ (0.020)	0.029 (0.020)	0.042* (0.019)	0.034+ (0.020)
GDP Growth	-0.001* (0.001)	-0.001* (0.001)	-0.001** (0.000)	-0.001* (0.000)
Oil	-0.083** (0.025)	-0.082** (0.025)	-0.085*** (0.026)	-0.087*** (0.026)
Ethnic fractionalization	-0.004** (0.001)	-0.004** (0.001)	-0.003* (0.001)	-0.004** (0.001)
Religious fractionalization	0.004* (0.002)	0.004+ (0.002)	0.005* (0.002)	0.004* (0.002)
Muslim	-0.001 (0.001)	-0.002+ (0.001)	-0.001 (0.001)	-0.001 (0.001)
Protestant	0.000 (0.002)	0.000 (0.002)	0.000 (0.002)	0.000 (0.002)
British colony	0.272* (0.121)	0.314** (0.121)	0.284* (0.122)	0.301* (0.121)
New country	-0.268*** (0.049)	-0.260*** (0.049)	-0.274*** (0.050)	-0.295*** (0.050)
PR	0.060 (0.043)	0.078+ (0.043)	0.046 (0.041)	0.071 (0.043)
Federalism	0.081 (0.076)	0.061 (0.077)	0.091 (0.077)	0.077 (0.077)
Age of Democracy	-0.002 (0.001)	-0.001 (0.001)	-0.002 (0.001)	-0.002 (0.001)
Western	0.161*** (0.033)	0.164*** (0.033)	0.165*** (0.034)	0.159*** (0.033)
World Democracy	0.006 (0.013)	0.003 (0.013)	0.007 (0.013)	0.007 (0.013)
LB	-0.027** (0.010)	-0.026* (0.010)	-0.028** (0.010)	-0.028** (0.010)
AB	0.017 (0.021)	0.017 (0.021)	0.014 (0.021)	0.014 (0.021)
CSES	-0.007 (0.006)	-0.007 (0.006)	-0.007 (0.006)	-0.007 (0.006)
1990s	-0.001 (0.012)	0.000 (0.012)	-0.001 (0.012)	0.000 (0.012)
2000s	0.001 (0.006)	0.002 (0.006)	0.001 (0.006)	0.000 (0.006)
Country Fixed Effects	yes	yes	yes	yes
R ²	0.934	0.935	0.934	0.934
Adj. R ²	0.928	0.928	0.928	0.928
Num. Obs.	785	785	785	785

+p < 0.1, *p < 0.05, **p < 0.01, ***p < 0.001

Note. OLS models, V-Dem “v2peapssoc” indicator for Horizontal Inequality, Country Fixed effects, Intercept omitted, standard errors in parentheses.

Appendix C: Table 8
The Effect of Ethnic Voting and Inequality on Democracy

DV: V2X Polyarchy

	Model 21: GVF	Model 22: GVP	Model 23: PVF	Model 24: PVP
Intercept	-0.024 (0.030)	-0.022 (0.030)	-0.024 (0.030)	-0.020 (0.030)
Lagged DV	0.973*** (0.011)	0.975*** (0.011)	0.972*** (0.011)	0.975*** (0.011)
Ethnic Voting	-0.017 (0.033)	-0.016 (0.020)	-0.020 (0.022)	0.009 (0.028)
Horizontal Inequality	-0.011 (0.011)	-0.013 (0.012)	-0.013 (0.011)	-0.009 (0.011)
EV * HI	0.065 (0.074)	0.065 (0.067)	0.072 (0.061)	0.024 (0.064)
GDP p.c.	0.007* (0.003)	0.006* (0.003)	0.007* (0.003)	0.006* (0.003)
GDP Growth	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)
Oil	-0.041*** (0.011)	-0.041*** (0.011)	-0.041*** (0.011)	-0.040*** (0.011)
Ethnic fractionalization	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)
Religious fractionalization	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)
Muslim	0.000+ (0.000)	0.000* (0.000)	0.000+ (0.000)	0.000+ (0.000)
Protestant	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)
British colony	0.003 (0.007)	0.004 (0.006)	0.003 (0.006)	0.003 (0.006)
New country	0.002 (0.004)	0.002 (0.004)	0.002 (0.004)	0.001 (0.004)
PR	0.004 (0.005)	0.005 (0.005)	0.004 (0.005)	0.004 (0.005)
Federalism	-0.002 (0.004)	-0.001 (0.004)	-0.003 (0.004)	-0.002 (0.004)
Age of Democracy	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)
Western	-0.008 (0.006)	-0.008 (0.005)	-0.007 (0.006)	-0.008 (0.006)
World Democracy	-0.006 (0.004)	-0.006 (0.004)	-0.007 (0.004)	-0.007 (0.004)
LB	0.004 (0.005)	0.004 (0.005)	0.004 (0.005)	0.004 (0.005)
AB	0.008 (0.005)	0.007 (0.005)	0.009+ (0.005)	0.007 (0.005)
CSES	0.002 (0.003)	0.002 (0.003)	0.002 (0.003)	0.002 (0.003)
1990s	0.000 (0.008)	0.000 (0.008)	0.000 (0.008)	0.000 (0.008)
2000s	-0.002 (0.003)	-0.002 (0.003)	-0.002 (0.003)	-0.002 (0.003)
R ²	0.969	0.969	0.969	0.969
Adj. R ²	0.968	0.968	0.968	0.968
Num. Obs.	727	727	727	727

+p < 0.1, *p < 0.05, **p < 0.01, ***p < 0.001

Note. OLS models, V-Dem “v2peapssoc” indicator for Horizontal Inequality, standard errors in parentheses.