

Charismatic authority and fractured polities: A cross-national analysis

Abstract:

Sociological research has overlooked the political consequences of charismatic leadership that arises in existing democratic political bureaucracies. In this article, we theorize the consequences of charismatic leadership in democratic nations by revisiting Max Weber's theory of charismatic authority. Our extension of Weber's theory of charismatic authority helps to address a gap in the political polarization literature concerning the role of charismatic leadership. This article provides a foundational link in the research on charismatic authority—bridging the literatures on charisma and cross-national comparative sociology. This bridging is enabled by advances in data collection that include information on charismatic authority in cross-national context. This article makes use of a Driscoll and Kraay fixed-effects analysis across 76 democracies from 1960-2009 to explore the relationship between charismatic leadership and political polarization. Our findings suggest that nations with higher levels of charismatic leadership tend to have higher levels of political polarization. These results contribute to both the literature on political polarization and charisma—as well as support our extension of Weber's theory of charismatic authority.

Keywords: Charismatic Authority, Political Polarization, Comparative Sociology

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Introduction

Since Max Weber's seminal work *Economy and Society* (1978 [1922]), sociological research has focused on charismatic authority as either arising through social interaction (Joosse 2012, 2018; Katz 1975; Reed 2013) or on its routinization in bureaucracy (Joosse 2017; Ritzer 1975; Schoon and West 2017). Little work, however, has addressed the associations between charismatic authority and various political outcomes of interest to political sociologists—especially in cross-national comparative perspective. In this article, we address this alternative perspective by investigating and theorizing the consequences of charismatic leadership in democratic nations. To do so, we follow Joosse (2017) by revisiting Weber's theory of charismatic authority. This allows us to use overlooked elements of Weber's account of charismatic leadership in partisan organizations to create a framework for understanding the connection between charismatic leadership in democratic organizations and political polarization.

Our extension of Weber's theory of charismatic authority helps to address the aforementioned alternative line of reasoning in the political polarization literature. While the debate over political polarization is complex, the literature generally follows two lines. First, scholars have found evidence that political polarization is driven by rising economic inequality (Adler and Ansell 2020; McCarty, Rosenthal, and Poole 2006; Stonecash 2000; Weeden and Grusky 2012). On the other, work has established that political polarization is driven by cues from partisan elites (Abrams

2008; Bafumi and Shapiro 2009; Baldassarri and Gelman 2008; Fiorina and Brooks and Manza 2013; Guisinger and Saunders 2017; Iyengar and Westwood 2015; Park 2018). However, scholars have yet to investigate charismatic leadership in state institutions as a potential source of political polarization.

Moreover, we contribute by exploring charismatic leadership in cross-national perspective. This article provides a foundational link in the literature on charismatic authority—bridging the literatures on charisma and cross-national sociology. This bridging is enabled by advances in data collection through the Varieties of Democracy project that includes information on charismatic authority in cross-national context as well as many other concepts of sociological interest (Coppedge et al. 2020). This advance in measurement allows for systematic comparisons across societies and will surely be of use to political sociologists who have integrated Weberian concepts such as bureaucratization to explain geopolitical outcomes such as national wealth (Evans and Rauch 1999), but have yet to integrate quantitative cross-national comparisons concerning charismatic authority.

We revisit Max Weber's theory charismatic authority by outlining his account of the rise of charismatic leadership in partisan organizations. We then extend Weber's account by outlining a process through which charismatic authority is associated with political polarization. We theorize that the demands of charismatic authority drive charismatic leaders in partisan organizations to intensify political polarization through two mechanisms: the polarization of political interaction and the polarization of partisan culture. Findings of our quantitative analysis suggest that nations with higher levels of charismatic leadership tend to have higher levels of political polarization. Our findings contribute to the literature on political polarization, as well as to the charisma

literature by offering an elaboration of theoretical mechanisms through which charismatic authority drives charismatic leaders in organizations to intensify political polarization.

Political Polarization

There is a longstanding debate over whether, and to what degree, political polarization has increased in recent years (DiMaggio et al. 1996; Park 2018), though most recent work suggests that citizens in democratic nations across the world have become more politically polarized since the 1980s (Birch 2019; DellaPosta 2020; Parl 2018; Sohlberg 2017). Sociologists argue that political polarization is driven to a great extent by economic inequality. For example, the literature on American elections suggests that citizens vote for candidates depending on the alignment of the voter's economic incentives and the economic policy advanced by the candidate's party (Bartels 2006; McCarty, Rosenthal, and Poole 2006; Stonecash 2001; Volscho and Kelly 2012; Widestrom et al. 2018). These findings then support work on the role of economic inequality in polarizing political attitudes (Dodson 2017; Weeden and Grusky 2012) and economic inequality and political polarization (McCarty, Rosenthal, and Poole 2006). More recent work in Europe on the connection between economic inequality and populism further buttresses this perspective (Adler and Ansell 2020; Carreras et al. 2018).

Another dominant perspective is that political polarization is driven by cues from partisan elites. Scholars in this literature demonstrate that voters are becoming more partisan in their attitudes, as polarization among partisan elites has corresponded with voters' alignment of their policy attitudes or political ideology and partisan identification (Baldassarri and Gelman 2008; Birch 2019; Brooks and Manza 2013; Fiorina and Abrams 2008; Guisinger and Saunders 2017; Iyengar and Westwood 2015; Park 2018; Sohlberg 2017). The literature also shows that partisan affiliation is associated with heterogeneous political attitudes and biases (Baldassarri and Goldberg

2014; Bartels 2002; Brooks and Manza 2013; Lodge and Taber 2013). Given this heterogeneity, different types of political polarization have occurred at different rates—with, for example, moral attitudes being the least polarized of late in the United States (Park 2018).

This debate is then supplemented with further work on the contextual and interactional factors that shape political polarization. Scholars have demonstrated that personal interaction in politically polarized environments intensifies political polarization (Liu and Srivastava 2015). Furthermore, the research on ethno-nationalist populism and political polarization suggests that ethnic divisions may affect levels of polarization (Olson 2008; Segura and Fraga 2008; Tesler 2016). Researchers have also established that factors such as political context and economic conditions shape voter polarization and policy attitudes (Johnson and Schwadel 2019). Political polarization can be exacerbated by social movement activity and outcomes (McVeigh et al. 2014).

Furthermore, a nation's civil society should be negatively associated with political polarization—as civil society is expected to increase trust and strengthen democratic institutions (Paxton 2002; Putnam et al. 1994)—as well as instill greater civic discourse (Stryker 2011). Crucially, however, while elements of context and social interaction have been investigated as factors that supplement the economic inequality/partisan cues debate, scholars have yet to examine how charismatic leadership in partisan organizations affects political polarization in political bureaucracies.

Charisma

Since Max Weber's seminal work on charismatic authority in *Economy and Society* (1978 [1922]), scholars have sought to expand the analysis of charisma beyond authority. Much work has been done to this effect from sociological theory (Bord 1975; Camic 1980; Dow 1969; Friedland 1964; Joosse 2014, 2017, 2018; Shills 1965) to the leadership and organizations literature (for a review see Antonakis et al. 2016).

Restricting analysis to charismatic authority, there are two primary strands in the literature. The first concerns charisma authority as arising through social interaction (Joosse 2012, 2018; Katz 1975; Reed 2013; for a review see Joosse 2018). Second is scholarship that focuses on the routinization of charismatic authority—which has been a hallmark of the Weberian perspective (Joosse 2017; Ritzer 1975). Here, scholars investigate the routinization of charisma in religion (Rocheford 1985; Schoon and West 2017), social movements (Andreas 2007; Nelson 1971), organizations (Clemens 1993; Ritzer 1975), and authoritarian regimes (Carrión 2006; Dow 1968; Germani 1978; Slater 2010; Svolik 2013). In particular, much of the empirical work on charismatic authority in various nations in the world explores the role of charisma in the maintenance of authoritarian regimes such as Fidel Castro’s Cuba (Fagen 1965; Hoffman 2009) or the Soviet Union under Joseph Stalin (Strong and Killingsworth 2011).

Furthermore, to our knowledge, little work exists exploring charismatic leadership in quantitative cross-national comparative perspective across a broad-sample of nations. To respond, we provide an overview of Weber’s theory of charismatic authority in order to elaborate Weber’s perspective into a framework for understanding processes through which charismatic authority in partisan organizations relates to political polarization. This theoretical focus on charismatic authority in competitive political parties establishes our empirical focus on democratic nations – a choice that presents an advance in the work on charismatic authority that often focuses on non-democracies or very fragile democratic systems.

Charismatic Authority and Weber’s Theory of Charismatic Authority in Partisan Organizations

For Max Weber (1978 [1922]), authority is defined as power that is accepted by those upon which it is exercised (Weber 1978[1922]: 212-6; Zelditch 2006). As we can see below in *table 1*, for Weber, there are two types of authority: impersonal and personal. Each type is then defined by

principles of legitimation that justify the acceptance of power. In turn, each principle of legitimation is used to justify authority in a corresponding institutional form (p. 953-4).

Impersonal authority is legitimated on rational grounds (p. 215-16, 954) by appeal to systems of rules and norms of compliance (p. 954). The corresponding institutional form is bureaucracy (Weber 1978 [1922]). Personal authority can be justified through two different principles of legitimation: tradition and charisma (p. 215-16, 954). For Weber, the institutional form of tradition is patriarchalism (p. 954). Conversely, charisma has no corresponding institutional form. The lack of corresponding institutional form for personal authority based in charisma leads to the charismatic leader's personalization of his/her staff and the erosion of existing institutional forms (p. 242).

<TABLE 1 HERE>

Weber defines "charisma" as a "quality" of an "individual personality by virtue of which he is considered extraordinary and treated as endowed with supernatural, superhuman, or at least superficially exceptional powers or qualities" (Weber 1978 [1922]: 241). As such, "charismatic authority" is defined by the subjective loyalty of followers (p. 242) and characterized as authority to the extent that followers have a "belief" in the leader's charisma. Such "belief in charisma" is a belief that the leader is a "a savior, a prophet, or a hero" (p. 954). This being the case, charismatic authority is always in doubt. The leader must constantly provide "proofs" of their "exceptional" characteristics. Once the leader ceases to provide such proofs, followers may begin to doubt the leader's charisma (p. 242, 1113). Thus, "[c]harismatic authority is naturally unstable" (p. 1114) and the exceptional status of the charismatic leader is always in jeopardy.

The constant need to provide "heroic proofs" makes this form of authority volatile and highly subjective (Weber 1978 [1922]: 252, 1113). As such, charismatic authority seeks to erode

other forms of authority and their corresponding institutional structures (p. 242). In doing so, charismatic leaders provide rules to their followers that are based on the personal characteristics of the leader and in the followers' subjective experience of the leader's heroic proofs (p. 1115).

While much attention has been paid to the routinization of charisma, Weber also theorizes charismatic leadership in political organizations. A key part of the theory is that democratic systems offer a perfect platform for charismatic partisan leaders to emerge by providing them with the opportunity to campaign. It is then during the campaign process that the charismatic partisan leader uses rhetoric to persuade partisans of their heroic status (p. 1129-30).

Once a charismatic partisan leader arises in a political organization, the leader comes into conflict with the party's organizational authorities. This is because of the conflicting types of authority and institutional structures. On the one hand, party leaders' authority is based in partisan rules and norms enacted by the party organization's bureaucracy. On the other, the charismatic partisan leader's authority is based in their own heroic feats and charismatic personality. As such, the charismatic partisan leader seeks to undermine partisan organizational structures. Weber sees this as an area that is rife for conflict between charismatic party leaders and party organizational leaders (p. 1130-3). While Weber argues that party organizations usually trump charismatic party leadership, he highlights the party system in democracies as an area of conflict in which charismatic party leaders seek to usurp the party organization and overthrow bureaucratic leaders (p. 1129-33).

Theorizing the Link Between Charismatic Authority and Political Polarization

As charismatic authority is subjective and based on the heroic proofs of the leader, in the context of a partisan organization embedded in an state system, we theorize how the charismatic party leader's proofs of heroism can become partisan. The charismatic party leader, embedded in a party organization, seeks to establish him/herself as the hero or savior of the party. This means

that heroic proofs become those of personal victory of the leader that advance their party. Furthermore, given the institutionalized opposition of alternative parties, we would then expect to see an antagonism intensify, as the charismatic party leader seeks to provide proofs of their heroism to reaffirm their authority through triumphs over the opposition. In this sense, we should see the charismatic leader provide cues to followers to move away from compromise with opponents and towards the consolidated power of the leader.

Thus, we theorize two mechanisms for polarization in terms of zero-sum politics based on Weber's theory of charismatic leadership and its role in political systems: 1) The Polarization of Political Interaction and 2) The Polarization of Partisan Culture.

Polarization of Political Interaction

Building on the charisma as performative literature (Joosse 2012, 2018; Katz 1975; Reed 2013), as well as literature that establishes the intensification of political polarization through personal interaction (Liu and Srivastava 2015), we theorize that a dichotomy emerges for followers of the charismatic leader in terms of loyalty. For charismatic leaders, there is no room for grey areas regarding competitors. Charismatic authority is based on the heroic feats of the leader and the loyalty of followers. If followers are not dogmatic, this raises doubts about the heroic status of the leader—which threatens the survival of the charismatic leader. In this frame, either the leader is a hero or is a charlatan. Thus, followers must pledge allegiance to the leader in stark terms. This leads to a contentious interactional environment: those who question the authority of the leader also question the judgment of the followers. If one rejects the leader, then one also puts into doubt the judgment of the follower.

The Polarization of Partisan Culture

In cultural theories of charisma (e.g. Smith 2000), we see charismatic authority depends heavily on the dichotomy of “good versus evil.” In the context of a party system this frame is applied by the charismatic leader to opponents. Thus, feats of the charismatic partisan leader involve the triumph of good over evil—with opponents being portrayed very negatively. This basic dichotomy of “good versus evil,” combined with the legitimation formula of authority through demonstration of heroism, pave the way for the charismatic leader to demonstrate their heroism through displays of conquest over political opponents. This then intensifies partisan polarization as the charismatic partisan leader further demonizes the opposing party and co-partisans who do not acquiesce to the charismatic leader’s agenda. This demonization would then seriously undermine any efforts at cross-party compromise or collaboration.

This theoretical framing allows us to suggest a formal hypothesis.

Hypothesis: Nations with leadership characterized as highly charismatic should exhibit higher levels of political polarization than those with less charismatic leadership.

RESEARCH STRATEGY

Data

To explore the association between charismatic leadership and political polarization in democracies, we make use of a merged datafile from a number of secondary sources but most notably drawing from the most recent release of the Varieties of Democracy Project (V-Dem 10) that contains measures for key concepts in this study drawn from expert coding for each nation at yearly intervals (Coppedge et al. 2020). Other measures are gathered from various secondary sources as detailed in further detail. These data cover 76 democratic nations, defined by the widely used >5 cutoff on the Polity scale from 1960 until 2009 (Marshall and Gurr 2020). Country-years are included in our analytical sample for years in which they met the democracy cutoff as described

above. In the section that follows, we detail the measures used in this study and then move to describe our statistical modeling procedure. All descriptive statistics for measures can be found in *table 2* below.

<TABLE 2 HERE>

Outcome Variable

Our outcome of interest is *Political Polarization* measured in the V-Dem dataset (Coppedge et al. 2020). This measure explores the extent to which society is polarized into “antagonistic, political camps” (Coppedge et al. 2020: p. 211). The measure addresses how social relations are affected by political differences in terms of how individuals become reluctant to engage in routine interactions because of political hostility (Coppedge et al. 2020: p. 211). The measure is originally presented as an ordinal scale from 0-5 with responses corresponding to: 0 or “Not at all. Supporters of opposing political camps generally interact in a friendly manner,” 1 or “Mainly not. Supporters of opposing political camps are more likely to interact in a friendly than a hostile manner,” 2 or “Somewhat. Supporters of opposing political camps are equally likely to interact in a friendly or hostile manner,” 3 or “Yes, to noticeable extent. Supporters of opposing political camps are more likely to interact in a hostile than friendly manner,” and finally 4 or “Yes, to a large extent. Supporters or opposing political camps generally interact in a hostile manner” (Coppedge et al. 2020: p. 211). This measure is converted into an interval measure from an ordinal scale by the V-Dem Bayesian item response theory measurement model (Coppedge et al. 2020; Pemstein et al. 2020).

This measure presents an advance over previous measures of political polarization as it captures the particularly relational nature of polarized politics (Lauka et al. 2018). While much of the work on the cross-national determinants of political polarization consider factors such as the ideological distance between parties (Inglehart 1990; Sartori 1976) or the proportion of individuals

in a country locating claiming extreme positions (Lindqvist and Östling 2010), these measures do not attend to perceptions of others that are a crucial component of political polarization (Lauka et al. 2018). These perceptions might take the form of extremely positive attitudes toward co-partisans and extremely negative attitudes toward non-co-partisans, or both (Abramowitz and Webster 2016; Caruana et al. 2014; Lauka et al. 2018; Mayer 2017). This affective-relational dimension of political polarization allows for a fuller conceptualization of polarization.

Independent Variable

Our main predictor variable of interest is *charismatic leadership* measured in the V-Dem 10.0 dataset as the measure *Person of the Leader* (v2exl_legitlead) (Coppedge et al. 2020). This measure addresses the extent to which the Chief Executive actor is portrayed “as being endowed with extraordinary personal characteristics and/or leadership skills (e.g. as father or mother or the nation, exceptionally heroic, moral, pious, or wise, or any other extraordinary attribute valued by the society” (Coppedge et al. 2020: p. 209). The measure corresponds to the key leadership figure in the government, be it Head of Government or Head of State and ranges from 0 or “not at all” to 4 or “almost exclusively.” This measure too is converted into an interval measure from an ordinal scale by the V-Dem measurement model (Coppedge et al. 2020; Pemstein et al. 2020). Importantly, this measure is theoretically consonant with Weber’s (1978[1922]) definition of charismatic authority as legitimated leadership emanating from unique characteristics of the leader themselves. As such, it does not correspond to changes in popularity or electoral support for the leader in question, but rather focuses on their specific style of leadership.

While democracies are more frequently characterized as being led by rational authorities, there is a great deal of variation across democracies as well as within democracies. Many countries that are officially democracies have leadership that can be characterized as charismatic. For instance, while Russia is considered a democracy for several years of this study (2001-2006),

Vladimir Putin consistently exhibits characteristics associated with charismatic leadership marketing his physical characteristics and martial arts expertise as indispensable facets of his brand (Tempest 2016). Meanwhile, Venezuela is likewise considered a democracy for a large proportion of the years of the current study (1958-2005) and experienced a sharp rise in charismatic leadership with Hugo Chávez's rise to political power in 1999. These cases demonstrate that charismatic leadership extends beyond the left-right ideological political spectrum and isolates a key element of governance in democracies.

Controls

We make an effort to control for theoretically relevant factors that may present threats of spuriousness to our focal relationship. These measures are all time-varying and are drawn from the extant literature on political polarization. Although the cross-national literature on political polarization is underdeveloped, we extend factors from case-study based approaches that might provide explanatory power at a cross-national level.

Our first control variable accounts for the extent to which economic inequality might drive political polarization in democracies (e.g. McCarty, Rosenthal, and Poole 2006; Weeden and Grusky 2012). For this, we use the gross Gini measure of inequality from the Standardized World Income Database (Solt 2009). Second, as partisan affiliation has been found to associated with household income (Bartels 2006; Gelman 2008; McCarty, Stonecash 2000; Rosenthal, and Poole 2006; Volscho and Kelly 2012; Widestrom et al. 2018) we include a measure of economic development, *GDP Per Capita* (World Bank) that may be related to political polarization at the country-level. These measures represent resource surplus or scarcity that make the stakes for political arguments more costly. As such, we expect GDP Per Capita will be negatively associated with political polarization.

We also account for factors that attend to the ways that partisan elites drive political polarization by providing cues to constituents to calcify political positions (e.g. Baldassarri and Gelman 2008; Brooks and Manza 2013). To account for this factor empirically, we use the V-Dem 10.0 measure *Leaders respect counterarguments* (v2dlcountr) which accounts for the extent to which political elites acknowledge and respect counterarguments. The measure is presented originally as an ordinal scale ranging from “0” or “Counterarguments are not allowed or if articulated, punished” to “5” or “Elites almost always acknowledge counterarguments and explicitly values them, and frequently also even accept them and change their position” (Coppedge et al. 2020: p. 150). This measure is converted from ordinal to interval by the V-Dem measurement model (Coppedge et al. 2020; Pemstein et al. 2020).

In addition, we control for the robustness of the civil society participation in a nation using V-Dem’s *Civil Society Participation Index*. This measure attends to the level of robustness of civil society participation where high scores correspond to civil society configurations where organizations are autonomous from the state and where individuals freely participate in a variety of organizations to pursue their political goals (Coppedge et al. 2020: p. 287; Bernhard et al. 2015). Nations with robust civil society participation should experience higher levels of trust and stronger democratic institutions that may impede political polarization (Paxton 2002; Putnam et al. 1994) and instill greater civic discourse (Stryker 2011).

Building on the research on ethno-nationalist populism and polarization we control for two factors found in the existing literature (Olson 2008; Segura and Fraga 2008; Tesler 2016). Our first measure is the ethnic fractionalization measure drawn from the Historical Index of Ethnic Fractionalization Dataset (HIEF) (Drazanova 2019). The HIEF measure captures the probability that two randomly drawn individuals will belong to two different ethnic groups ranging from 0 to

1 (Drazanova 2019). This yearly measure is an advance over other factors in this literature that measure ethnic fractionalization as static and based on historical sources such as the Soviet *Atlas Narodov Mira* 1964 (Fearon and Laitin 2003). The second factor related to ethnic politics used in this study is measure of politically excluded population based on ethnicity drawn from the Ethnic Power Relations Dataset (EPR V. 3) (Wimmer et al. 2009). This measure goes beyond diversity and attends to political dynamics of exclusion from the political process based on ethnic categories that might drive nationalism and increase social conflict (Gellner 1991; Wimmer et al. 2009). Both of these measures capture yearly changes in the level of ethnic diversity and ethnic-based exclusion and have an additional benefit of being useful in longitudinal modeling processes in which yearly variation is necessary to obtain estimates, such as fixed-effects modeling (Allison 2009).

We also account for the possibility that violent conflict may exacerbate political hostilities and polarization. To control for this, we include measures of the number of years of peace since the outbreak of a civil war. Longer spells of peace years may reduce political polarization. Second, we use a dichotomous indicator of whether or not there is an ongoing conflict in the nation. Both of these measures are based on coding of conflicts by the widely used Uppsala/Prio Armed Conflict Database (ACD) which defines conflicts based on whether or not violence between various organized parties such as rebel groups or the state reaches 25 battlefield deaths in a year (Gleditch et al. 2002). As a final control, we follow extant work on cross-national quantitative investigations in the social sciences and include a measure of a nation's population.

Modeling

To ensure robustness against the threat of possible dependencies among residuals we adjust our standard errors to account for heteroscedasticity, temporal autocorrelation, and spatial dependence (Hoechle 2007). To accomplish this we make use of a two-way fixed effects regression model using Driscoll-Kraay corrected standard errors using the xtscv written program in Stata 16

(Hoechle 2007). This model choice was made following the logic of Hoechle (2007) and Muñoz, Olzak, and Soule (2018) by implementing a Pesaran CD test to test for dependencies across panels, in addition to offering corrected estimates for temporal autocorrelation. Results of this test led us to reject the null of cross-sectional independence indicating correlation across panel groups. As results are consistent across the range of lag structures we investigated, up to the maximum lag length ($m(T) = T-1$), we have opted to present results based on the default moving average lag setting $m(T) = \text{floor}[4(T/100)^{2/9}]$ (Hoechle 2007 p. 10). We include both yearly and country-level fixed effects in our estimations to account for threats to spuriousness based on within-unit over-time unobserved heterogeneity (Allison 2009). We first present a reduced model examining the relationship between our key predictor, charismatic authority and political polarization inclusive of all modeling constraints, and then proceed to a subsequent model that introduces our theoretically informed control variables.

RESULTS

In the following section we present the results of our two-way fixed effects analysis with Driscoll and Kraay standard errors are summarized in *table 3* below.

<TABLE 3 HERE>

Model 1 presents the bivariate association between a country's level of charismatic leadership and political polarization inclusive of two-way fixed effects and Driscoll and Kraay corrected standard errors. The association between charismatic leadership and political polarization is statistically significant and positive ($\beta = 0.34, p < 0.001$). This indicates that higher levels of charismatic leadership are associated with increases in political polarization. In addition Model 2 presents the association between charismatic leadership and political polarization net of

both theoretically relevant control variables and two-way fixed effects. Results of this model reveal a statistically significant positive association ($\beta = 0.21$, $p < 0.001$) between charismatic leadership and political polarization that persists despite the inclusion of relevant control variables. Taken together, these results suggest robust support for our claim that more politically polarized democracies should tend to have higher levels of charismatic leadership in preceding years.

In addition to our focal association that we have explored above, we find associations among several control variables and our outcome. In our full model, we find a statistically significant association between levels of our measure of *leaders respecting counterarguments* and political polarization in a negative direction ($\beta = -0.30$, $p < 0.001$). This suggests that more civil discourse among political leaders is associated with less political polarization. In addition, we find support for previous research linking economic inequality and ethnic diversity to political polarization. The Gini coefficient is significantly positively related to higher levels of political polarization ($\beta = 0.01$, $p < 0.01$). Meanwhile the ethnic fractionalization index is likewise positively related with levels of political polarization ($\beta = 3.25$, $p < 0.001$). The proportion of the population excluded from power along ethnic lines is likewise positively related to higher levels of political polarizations ($\beta = 0.15$, $p < 0.05$). Likewise, the civil society participation index is positively related to political polarization in this model ($\beta = 1.19$, $p < 0.05$). Finally, we find that the GDP per capita is negatively related to political polarization, indicating that higher levels of national wealth is negatively associated with political polarization ($\beta = -0.84$, $p < 0.001$).

In supplementary analyses, we have examined alternative modeling strategies including a first differences model, a two-way fixed effects model with clustered robust standard errors, and a dynamic two-way fixed effects model that includes a lagged dependent variable on the right hand

side of the equation.¹ While our focal association is robust to these alternative specifications, estimates of control variables as discussed above vary across model specification. For the first differences model, we find complimentary results at the $p < 0.05$ level with regards to leaders respecting counterarguments and ethnic exclusion. Finally, for the dynamic panel model we find complimentary results with regard to the Gini coefficient. Given the range of findings across models, we urge caution in interpreting our non-focal findings as conclusive.

DISCUSSION AND CONCLUSIONS

Results of both of our models taken together reveal strong support for our hypothesis that nations with higher levels of charismatic leadership will also tend to exhibit higher levels of political polarization. These findings, then, help to establish charismatic leadership as an enduring factor for intensifying political polarization. This finding contributes to both the charisma and polarization literature, as well as supports our extension of Weber's theory of charismatic authority. We theorize that that this statistical association can be linked to two mechanisms through which charismatic leaders in partisan organizations attempt to establish and maintain their charismatic authority.

First, charismatic leaders generate political polarization through the "Polarization of Political Interaction." According to this theorization, charismatic leaders in partisan organizations rely on the subjective allegiance of followers based on the leader's heroic proofs. As such, there is a polarization of the social interaction in the political arena—both among political elites and among everyday people—in terms of loyalty to the charismatic leader. Either the leader is a hero or a charlatan. Subsequently, as loyalty is subjective, any doubt of the charismatic leader's status by outsiders calls into question the judgment of the leader's followers. Therefore, the demands to

¹ Results from these models are available by request from the authors.

charismatic authority, both for the leader and their followers, creates a highly polarized political environment. This element is operationalized by the Varieties of Democracy Project data set's pioneering measures of political polarization and charismatic authority.

Our second theorized mechanism, the “Polarization of Partisan Culture.” Charismatic leaders' rhetoric is characterized by the dichotomy of good versus evil (e.g. Smith 2000). In a partisan context, then, charismatic leaders likely demonstrate their exceptional leadership through triumph over political opponents—seriously undermining any attempts at cross-party compromise or collaboration. Given that charismatic authority is based on heroic proofs, and given the leader's role as an authority figure in a partisan organization, we theorize that the charismatic leader's ability to maintain their charismatic authority would be based in their polarization of partisan culture so as to not only frame the opposition as evil, dangerous, or destructive, but also to make this dichotomy part of the legitimation process through which the charismatic leader maintains their charismatic authority among fellow partisans. Once again, the outcomes of this mechanism are operationalized the Varieties of Democracy Project (V-Dem 10) data set's innovative measures of political polarization and charismatic authority

Our findings support a novel route to political polarization through the charisma literature. We develop an account of how charismatic leadership in state systems affects political outcomes. The scope of our data also encourages the charisma literature to expand to cross-national analyses of charisma. Scholars of political sociology might use similar measures of charismatic authority to help understand a wide variety of sociological outcomes. We expect that the current study may provide a foundational link for future research in this vein.

There are some key limitations to our analysis. First, it is important to note, however, that influence of charismatic leadership on society and politics does not always simply constitute a

deepening of pre-existing divisions. As such, we should understand these two mechanisms as possible influences of charismatic leadership. For example, in some instances charismatic leadership creates new societal divisions, as charismatic leaders work to ‘bedevil’ existing authorities on the side they ostensibly support (Joosse 2018: 1003-1006). Katz (1975) also explores the transformational effects of charisma on moral systems.

Furthermore, this article does not account for an alternative hypothesis that charismatic leaders might succeed at uniting rather than dividing polities—thereby reducing rather than exacerbating polarization. Indeed this potential framing is elaborated in prior theoretical work that has been empirically examined in comparative cross-national context (Willner and Willner 1965). This theoretical work, in particular explores how in newly independent states charismatic leadership can play a role in the nation-building process. While it is tempting to suggest that this manuscript offers evidence against this theoretical work, our sample of nations are to a great degree distinct from one representing newly independent nations and thus cannot be adequately compared. Nevertheless, the quite plausible notion that charismatic authority might be associated with less political polarization in democratic nations does not find support in this analysis.

Methodologically, we have worked to account for potential biases in observational data arrayed over time, yet there are unavoidable limitations to such estimation procedures. For example, while our two-way fixed effects estimation procedures accounts for within-case unobserved heterogeneity over time, they cannot address the effects of variables that do not change over time that may potentially be of theoretical interest (Allison 2009). Relatedly, the exact nature of the unobserved variables accounted for at the country and year level remain unclear (Angrist and Pischke 2009). Though we cannot provide estimates for each unobserved factor, such as land-

area, these factors are controlled for in our models leading to more confidence in our primary findings.

Further limitations at the theoretical and measurement level are that there may well be latent varieties of charismatic leadership that are driving the net effect of the broad measure of charismatic leadership from the V-Dem dataset. Such varieties might reflect distinctions in the Weberian notion of charismatic leadership itself – for instance, some charismatic leaders might derive legitimated authority from heroic battlefield myths, while others from perception of being religiously anointed. These important distinctions may be the subject of further investigation into the dynamics of charismatic authority in cross-national perspective.

In addition, while this work offers theoretically informed explanations for the association between charisma and polarization we have detected, we suggest that future work might take a case-study approach to offer deeper insights into the theoretical mechanisms outlined here. Previously in this article, we briefly introduced two potential cases of charismatic leaders, Venezuela's Hugo Chavez and Russia's Vladimir Putin. Future work might explore the extent to which in each case the ascension of the charismatic figure contributed to the polarization of political interaction and the polarization of political culture in these countries that indeed do exhibit comparatively high levels of political polarization.

References

- Abramowitz, Alan and Steven Webster. 2016. "The Rise of Negative Partisanship and the Nationalization of U.S. Elections in the 21st Century." *Electoral Studies* 41: 12-22.
- Adler, David, and Ben Ansell. 2020. "Housing and populism". *West European Politics*. 43 (2): 344-365.
- Allison, Paul. 2009. *Fixed Effects Regression Models*. Los Angeles: Sage.
- Andreas, Joel. 2007. "The Structure of Charismatic Mobilization: A Case Study of Rebellion During the Chinese Cultural Revolution". *American Sociological Review*. 72 (3): 434-458.
- Angrist, Joshua D. and Jörn-Steffen Pischke. 2009. *Mostly Harmless Econometrics: An Empiricist's Companion*. Princeton, NJ: Princeton University Press.
- Antonakis, John, Nicolas Bastardo, Philippe Jacquart, and Boas Shamir. 2016. "Charisma: An Ill-Defined and Ill-Measured Gift". *Annual Review of Organizational Psychology and Organizational Behavior*. 3 (1): 293-319.
- Atlas Narodov Mira*. 1964. Moscow: Glavnoe upravlenie geodezii i kartografii.
- Bafumi, Joseph, and Robert Y. Shapiro. 2009. "A New Partisan Voter". *Journal of Politics*. 71 (1): 1-24.
- Baldassarri, Delia, and Andrew Gelman. 2008. "Partisans without Constraint: Political Polarization and Trends in American Public Opinion." *The American Journal of Sociology* 114 (2).
- Baldassarri, Delia, and Amir Goldberg. 2014. "Neither Ideologues nor Agnostics: Alternative Voters' Belief System in an Age of Partisan Politics." *American Journal of Sociology* 120 (1).
- Bartels, Larry M. 2002. "Beyond the Running Tally: Partisan Bias in Political Perceptions." *Political Behavior* 24 (2).
- _____. 2006. "What's the Matter with 'What's the Matter with Kansas?'" *Quarterly Journal of Political Science* 1 (2): 201–26
- Bernhard, Michael, Eitan Tzelgov, Dong-Joon Jung, Michael Coppedge and Staffan I. Lindberg. 2015. "The Varieties of Democracy Core Civil Society Index." V-Dem Working Paper Series 2015: 13. *The Varieties of Democracy Institute*.
- Birch S. 2019. "Political polarization and environmental attitudes: a cross-national analysis". *Environmental Politics*.
- Bord, Richard J. 1975. "Toward a Social-Psychological Theory of Charismatic Social Influence Processes". *Social Forces*. 53 (3): 485-497.
- Brooks, Clem, and Jeffrey Manza. 2013. "A Broken Public? Americans' Responses to the Great Recession." *American Sociological Review* 78 (5): 727–48.
- Cameron, A. Colin, and Douglas L. Miller. 2015. "A practitioner's guide to cluster-robust inference." *Journal of Human Resources* 50 (2): 317-372.
- Camic, Charles. 1980. "Charisma: Its Varieties, Preconditions, and Consequences*". *Sociological Inquiry*. 50 (1): 5-23.
- Carreras Miguel, Yasemin Irepoglu Carreras, and Shaun Bowler. 2019. "Long-Term Economic Distress, Cultural Backlash, and Support for Brexit". *Comparative Political Studies*. 52 (9): 1396-1424.
- Carrion, Julio F. 2006. *The Fujimori legacy: the rise of electoral authoritarianism in Peru*. Pennsylvania: Penn State University Press.
- Caruana, Nicholas J., R. Michael McGregor, and Laura B. Stephenson. 2014. "The Power of the Dark Side: Negative Partisanship and Political Behavior in Canada." *Canadian Journal of Political Science* 48 (4): 771-789.

- Clemens, Elisabeth S. 1993. "Organizational Repertoires and Institutional Change: Women's Groups and the Transformation of U.S. Politics, 1890-1920". *American Journal of Sociology*. 98 (4): 755-98
- Coppedge, Michael, John Gerring, Carl Henrik Knutsen, Staffan I. Lindberg, Jan Teorell, David Altman, Michael Bernhard, M. Steven Fish, Adam Glynn, Allen Hicken, Anna Lührmann, Kyle L. Marquardt, Kelly McMann, Pamela Paxton, Daniel Pemstein, Brigitte Seim, Rachel Sigman, Svend-Erik Skaaning, Jeffrey Staton, Agnes Cornell, Lisa Gastaldi, Haakon Gjerløw, Valeriya Mechkova, Johannes von Römer, Aksel Sundtröm, Eitan Tzelgov, Luca Uberti, Yi-ting Wang, Tore Wig, and Daniel Ziblatt. 2020. "V-Dem Codebook v10". Varieties of Democracy (V-Dem) Project.
- DellaPosta, Daniel. 2020. "Pluralistic Collapse: The "Oil Spill" Model of Mass Opinion Polarization". *American Sociological Review*. 85 (3): 507-536.
- DiMaggio, Paul, John Evans, and Bethany Bryson. 1996. "Have American's Social Attitudes Become More Polarized?" *American Journal of Sociology*. 102 (3): 690-755.
- Dodson, Kyle. 2017. "Economic Change and Class Conflict over Tax Attitudes: Evidence from Nine Advanced Capitalist Democracies". *Social Forces*. 95 (4): 1509-1538.
- Dow, Thomas E. 1968. "The Role of Charisma in Modern African Development". *Social Forces*. 46 (3): 328-338.
- _____. 1969. "The Theory of Charisma". *Sociological Quarterly*. 10 (3): 306-318.
- Drazanova, Lenka, 2019, "Historical Index of Ethnic Fractionalization Dataset (HIEF)", <https://doi.org/10.7910/DVN/4JQRCL>, Harvard Dataverse, V1, UNF:6:z4J/b/PKbUpNdIoeEFPvaw== [fileUNF]
- Evans, Peter and James E. Rauch. 1999. "Bureaucracy and Growth: A Cross-National Analysis of the Effects of Weberian State Structures on Economic Growth." *American Sociological Review*.
- Fagen, Richard R. 1965. "Charismatic authority and the leadership of Fidel Castro." *Western Political Quarterly* 18, no. 2-1: 275-284.
- Fearon, James D. and David D. Laitin. 2003. "Ethnicity, Insurgency, and Civil War." *American Political Science Review* 97(1): 75-90.
- Fiorina, Morris P., and Samuel J. Abrams. 2008. "Political Polarization in the American Public". *Annual Review of Political Science*. 11 (1): 563-588.
- Friedland, William H., and Max Weber. 1964. *For a sociological concept of charisma*. Ithaca, N.Y.: Cornell University.
- Gelman, Andrew. 2008. *Red State, Blue State, Rich State, Poor State: Why Americans Vote the Way They Do*. Princeton: Princeton University Press.
- Gellner, Ernest. 1991. "Nationalism and Politics in Eastern Europe." *New Left Review* 189:127–43
- Germani, Gino. 1978. *Authoritarianism, fascism, and national populism*. New Brunswick, N. J.: Transaction.
- Green, Donald P., Soo Yeon Kim and David H. Yoon. 2001. "Dirty Pool." *International Organization* 55 (2): 441-468.
- Guisinger, Alexandra, and Elizabeth N. Saunders. 2017. "Mapping the Boundaries of Elite Cues: How Elites Shape Mass Opinion across International Issues". *International Studies Quarterly*. 61 (2): 425-441.
- Hoechle, Daniel. 2007. "Robust standard errors for panel regressions with cross-sectional dependence." *The Stata Journal* 7 (3): 281-312.

- Hoffmann, Bert. 2009. "Charismatic authority and leadership change: Lessons from Cuba's Post-Fidel succession." *International Political Science Review* 30 (3): 229-248.
- Iyengar, Shanto, and Sean J. Westwood. 2015. "Fear and Loathing across Party Lines: New Evidence on Group Polarization". *American Journal of Political Science*. 59 (3): 690-707.
- Inglehard, Ronald. 1990. *Culture Shift in Advanced Industrial Society*. Princeton, NJ: Princeton University Press.
- Johnson, Erik W, and Philip Schwadel. 2019. "Political Polarization and Long-Term Change in Public Support for Environmental Spending". *Social Forces*. 98 (2): 915-941.
- Joose, Paul. 2012. "The Presentation of the Charismatic Self in Everyday Life: Reflections on a Canadian New Religious Movement". *Sociology of Religion*. 73 (2): 174-199.
- _____. 2014. "Becoming a God: Max Weber and the social construction of charisma". *Journal of Classical Sociology*. 14 (3): 266-283.
- _____. 2017. "Max Weber's Disciples: Theorizing the Charismatic Aristocracy". *Sociological Theory*. 35 (4): 334-358.
- _____. 2018. "Countering Trump: Toward a Theory of Charismatic Counter-Roles". *Social Forces*. 97 (2): 921-944.
- Katz, Jack. 1975. "Essences as Moral Identities: Verifiability and Responsibility in Imputations of Deviance and Charisma". *American Journal of Sociology*. 80 (6): 1369-1390.
- Lauka, Alban, Jennifer McCoy, and Rengin B. Firat. 2018. "Mass partisan polarization: Measuring a relational concept." *American Behavioral Scientist* 62 (1): 107-126.
- Lindqvist, Erik, and Robert Östling. 2010. "Political Polarization and the Size of Government." *American Political Science Review* 104 (3): 543-565.
- Liu, Christopher C., and Sameer B. Srivastava. 2015. "Pulling Closer and Moving Apart: Interaction, Identity, and Influence in the U.S. Senate, 1973 to 2009". *American Sociological Review*. 80 (1): 192-217.
- Lodge, Milton, and Charles S. Taber. 2013. *The rationalizing voter*. New York: Cambridge University Press.
- Marshall, Monty G. and Ted Robert Gurr. 2020. "Polity5: Political Regime Characteristics and Transitions, 1800-2018." Dataset Users' Manual. Center for Systemic Peace.
- Mayer, Sabrina Jasmin. 2017. "How negative partisanship affects voting behavior in Europe: Evidence from an analysis of 17 European multi-party systems with proportional voting." *Research & Politics* 4 (1).
- McCarty, Nolan M., Keith T. Poole, Howard Rosenthal. 2006. *Polarized America: The Dance of Ideology and Unequal Riches*. Cambridge, Mass: MIT Press.
- McVeigh, Rory, David Cunningham, and Justin Farrell. 2014. "Political Polarization as a Social Movement Outcome: 1960s Klan Activism and Its Enduring Impact on Political Realignment in Southern Counties, 1960 to 2000". *American Sociological Review*. 79 (6): 1144-1171.
- Muñoz, John, Susan Olzak, and Sarah Soule. 2018. "Going Green: Environmental Protest, Policy, and CO₂ Emissions in U.S. States, 1990-2007." *Sociological Forum* 33 (2).
- Nelson, Harold A. 1971. "Leadership and Change in an Evolutionary Movement: An Analysis of Change in the Leadership Structure of the Southern Civil Rights Movement". *Social Forces*. 49 (3): 353-371.
- Olson, Joel. 2008. "Whiteness and the Polarization of American Politics". *Political Research Quarterly*. 61 (4): 704-718.
- Park, Barum. 2018. "How are we apart? Continuity and change in the structure of ideological

- disagreement in the American public, 1980-2012". *Social Forces*. 96 (4): 1757-1784.
- Paxton, Pamela. 2002. "Social capital and democracy: An interdependent relationship." *American Sociological Review*: 254-277.
- Pemstein, Daniel, Kyle L. Marquardt, Eitan Tzelgov, Yi-ting Wang, Juraj Medzihorsky, Joshua Krusell, Farhad Miri, and Johannes von Römer. 2020. "The V-Dem Measurement Model: Latent Variable Analysis for Cross-National and Cross-Temporal Expert-Coded Data". V-Dem Working Paper No. 21. 5th edition. University of Gothenburg: Varieties of Democracy Institute.
- Putnam, Robert D., Robert Leonardi, and Raffaella Y. Nanetti. 1994. *Making democracy work: Civic traditions in modern Italy*. Princeton University Press.
- Reed, Isaac Ariail. 2019. "Performative State-Formation in the Early American Republic". *American Sociological Review*. 84 (2): 334-367
- Ritzer, George. 1975. "Professionalization, Bureaucratization and Rationalization: The Views of Max Weber". *Social Forces*. 53 (4): 627-634.
- Rochford, E. Burke. 1985. *Hare Krishna in America* New Brunswick, N.J.: Rutgers University Press.
- Sartori, Giovanni. 1976. *Parties and Party Systems: A Framework for Analysis*. Cambridge, UK: Cambridge University Press.
- Schoon, Eric W., and A. Joseph West. 2017. "From Prophecy to Practice: Mutual Selection Cycles in the Routinization of Charismatic Authority". *Journal for the Scientific Study of Religion*. 56 (4): 781-797.
- Segura, Gary M., and Luis R. Fraga. 2008. "Race and the Recall: Racial and Ethnic Polarization in the California Recall Election". *American Journal of Political Science*. 52 (2): 421-435
- Shils, Edward. 1965. "Charisma, Order, and Status". *American Sociological Review*. 30 (2): 199-213.
- Slater, Dan. 2010. *Iron cage in an iron fist: Authoritarian institutions and the personalization of power in Malaysia*. London and New York: Routledge.
- Smith, Philip. 2000. "Culture and Charisma: Outline of a Theory". *Acta Sociologica*. 43 (2): 101-111.
- Sohlberg Jacob. 2017. "The effect of elite polarization: A comparative perspective on how party elites influence attitudes and behavior on climate change in the European union". *Sustainability*. 9 (1).
- Solt, Frederick. 2009. "Standardizing the World Income Inequality Database." *Social Science Quarterly*. 90 (2).
- Stonecash, Jeffrey M. 2001. *Class and Party in American Politics*. Boulder, Colo: Westview Press.
- Strong, Carol, and Matt Killingsworth. 2011. "Stalin the charismatic leader?: Explaining the 'cult of personality' as a legitimation technique." *Politics, Religion & Ideology* 12 (4): 391-411.
- Stryker, Robin. 2011. "National institute of civil discourse research Brief 6: Political polarization." Tucson, AZ: National Institute for Civil Discourse.
- Svolik, Milan W. 2013. *The Politics of Authoritarian Rule*. Cambridge: Cambridge University Press.
- Tempest, Richard. 2016. "The Charismatic Body Politics of President Putin." *Journal of Political Marketing* 15, Issue 2-3: Political Space in Eurasia: Global Contexts, Local outcomes: 101-119.
- Tesler, Michael. 2016. *Post-racial or most-racial?: race and politics in the Obama era*. Chicago: The University of Chicago Press.

- Volscho, Thomas W., and Nathan J. Kelly. 2012. "The Rise of the Super-Rich Power Resources, Taxes, Financial Markets, and the Dynamics of the Top 1 Percent, 1949 to 2008." *American Sociological Review* 77 (5): 679–99.
- Weber, Max. *Economy and Society 1 & 2* Berkeley: University of California Press, [1922] 1978.
- Weeden, Kim A., and David B. Grusky. 2012. "The Three Worlds of Inequality." *American Journal of Sociology* 117 (6): 1723–85.
- Widestrom, Amy, Thomas J. Hayes, and Christopher Dennis. 2018. "The Effect of Political Parties on the Distribution of Income in the American States: 1917-2011." *Social Science Quarterly* 99 (3): 895–914.
- Willner, Ann Ruth and Dorothy Willner. 1965. "The Rise and Role of Charismatic Leaders." *The Annals of the American Academy of Political and Social Sciences*. Vol. 358, pp. 77-88.
- Wimmer, Andreas, Lars-Erik Cederman, and Brian Min. 2009. "Ethnic Politics and Armed Conflict: A Configurational Analysis of a New Global Data Set." *American Sociological Review* 74: 316-337.
- Zelditch, Morris. 2006. "Legitimacy Theory." In *Contemporary Social Psychological Theories*, edited by Peter J. Burke, 334–52. Stanford, CA: Stanford University Press.

Table 1. Max Weber's Typology of Authority, Principles of Legitimation, and Institutional Forms in *Economy and Society*

Authority Type	Principle of Legitimation	Institutional Forms
Impersonal	Rational (215-6, 954)	Bureaucracy (954)
Personal Authority	Tradition (215-6, 954)	Patriarchalism (954)
	Charisma (215-6, 954)	NA (954)

Table 2. Estimation Sample Descriptive Statistics of Key Variables across 76 Democratic Nations from 1960 to 2009

Variable	Obs.	Mean	Std. Dev.	Min.	Max.	Source
Political polarization	1,551	-1.01	1.14	-3.53	2.54	V-Dem10
Charismatic authority	1,435	-1.29	1.21	-3.14	3.11	V-Dem10
Leaders respect counterarguments	1,435	1.36	0.82	-2.34	2.91	V-Dem10
Civil society participation	1,435	0.80	0.14	0.17	0.98	V-Dem10
GDP per capita(ln)	1,435	2.27	0.94	-1.44	3.95	World Bank
Population(ln)	1,435	9.42	1.30	6.48	12.38	World Bank
Gini	1,435	45.23	8.14	25.01	77.28	SWID
Ethnic fractionalization	1,435	0.34	0.24	0.00	0.89	HIEF
Ethnic exclusion(ln)	1,435	1.52	1.35	0.00	4.50	EPR V. 3
Years since last war	1,435	25.14	19.87	0.00	62.00	EPR V. 3
Ongoing war	1,435	0.15	0.36	0.00	1.00	ACD

Table 3. Driscoll and Kraay Fixed Effects Estimates of Charismatic Authority and Polarization

VARIABLES	(Model 1)	(Model 2)
Charismatic authority	0.34*** (0.04)	0.21*** (0.04)
Leaders respect counterarguments		-0.30*** (0.07)
Civil society participation index		1.19* (0.49)
GINI		0.01** (0.00)
GDP per capita _(ln)		-0.84*** (0.18)
Population _(ln)		0.66+ (0.34)
Years since last war		0.00 (0.00)
Ongoing war		0.04 (0.07)
Ethnic excluded population _(ln)		0.15* (0.07)
Ethnic fractionalization		3.25*** (0.81)
Constant	-0.61*** (0.06)	0.00 (0.00)
Observations	1,435	1,435
Country + year FE	Y	Y
Number of groups	76	76

Driscoll and Kraay standard errors in parentheses. All predictors lagged 1 year.

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

