

How do Sanctions Affect Incumbent Electoral Performance?*

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Abstract

How do sanctions affect incumbent electoral performance during elections? Although existing literature suggests that sanctions may shorten or prolong incumbent tenure, we are less informed about their role in incumbent electoral fortunes. This research argues that sanctions hurt incumbents' vote shares because citizens are more likely to hold their elected officials accountable for sanction-induced economic hardships and political instabilities. It also argues that the electoral punishment is pronounced in less democratic countries because sanctions, together with elections, significantly limit dictator's co-optation strategy and open a greater window of opportunity for once repressed opposition groups in a repressive regime. Using 381 multiparty elections in 79 countries between 1972 and 2012, this research finds that sanctions deteriorate the incumbent electoral performance and they do so for autocratic leaders more than the democratic leaders. This study has important implications about the potential accountability in autocracies, the timing of sanctions imposition, the role of oppositions' mobilization, and broadly speaking, the role of sanctions in democratization.

Introduction

Our understanding of how sanctions influence electoral performance is limited. Previous studies present conflicting theoretical arguments and mixed empirical evidence. On the one hand, democratic leaders are more likely to be punished when their constituents suffer under sanction-induced hardship—and autocratic leaders simply pass along sanction-induced burdens to ordinary citizens. On the other hand, sanctions make dictators vulnerable by limiting resources for co-optation and mobilizing opposition groups. While

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existing research does provide a deeper understanding of the influence of sanctions on tenure in office, it does not reveal how sanctions affect incumbent vote share. My research fills this gap in the literature by exploring how sanctions may destabilize regimes, especially during an election.

Focusing on elections, I theorize that sanctions tend to hurt an incumbent's vote share because sanction-driven economic turmoil upsets voters' well-being. Additionally, I argue that autocrats lose more votes from sanctions than democratic leaders because they might have fewer goodies to hand out as part of co-optation strategy. Moreover, sanctions can create opportunities to embolden opposition groups and mobilize the public in autocracies. Frustrated and marginalized opposition groups in autocracies gain political momentum from an exogenous shock, such as an adverse economic sanction, and tend to engage in electoral contests, and consequently invite electoral threats to ruling elites.

This research examines 381 multi-party elections from 79 countries between 1972 and 2012. This study includes both electoral authoritarian regimes as well as full democracies. The findings of the paper support the theoretical expectation that economic sanctions do not help incumbents but rather undermine their electoral performance by reducing their vote share during elections. I also find supportive evidence for the conditional hypothesis, which expects that the effect of sanctions on the incumbent vote share is more pronounced in less democratic countries.

This research makes several contributions to both the study of sanctions and how we think about the timing of elections, especially in authoritarian regimes. First, contrary to conventional wisdom, I suggest that authoritarian elections provide a means of holding the regime accountable during foreign policy crises. Existing research suggests that sanctions are less effective against autocratic states because there are no credible mechanisms by which the public can hold a leader accountable for the political and economic hardship created by the sanctions. This literature inadvertently implies that elections in

authoritarian countries do not matter. However, I demonstrate that elections are conduits for dissatisfaction of political and economic turmoil created by sanctions even in countries where elections are not supposed to be meaningful. In other words, autocrats are not insulated from economic pressure since sanctions have similar effects on authoritarian and democratic leaders in elections.

Second, this research suggests a temporal dimension in considering effective sanctions. Although scholars have long explored various conditions that make sanctions effective in inducing policy concession, the particular 'timing' of a sanction, and how timing helps it to achieve its intended goal such as democratization is under-examined. The findings of this research imply that economic sanctions work effectively when targeted leaders are most vulnerable, and that elections that offer a venue for electoral accountability make incumbents most vulnerable. Elections are a pressure point that senders can use to make sanctions effective.

Finally, given the fact that elections create an official and tangible mechanism for holding incumbents accountable, and that the timing of democratic transitions is almost always linked to elections (Donno 2013), this research suggests implications for the role of sanctions in democratization. While previous studies have set out vague expectations for whether sanctions assist or delay democratization, this research helps clarify how sanctions may weaken an incumbent's political foothold during an election, which can ultimately create a good ground for power alternations. Moreover, this research sheds light on the importance of opposition group coalitions in creating a 'liberalizing electoral outcome' (Howard and Roessler 2006) in multi-party authoritarian regimes. Such liberalization can be rapid and dramatic if repressed oppositions groups find new electoral prospects, stimulated by foreign sanctions.

Political Elites under Sanctions

Current research indicates that sanctions have different effects on political elites across regime types (Allen 2008; Marinov 2005; Escriba-Folch and Wright 2010; Major 2012; Cox and Drury 2006). Bueno de Mesquita and his colleagues explain this observation in their selectorate theory (2004). In democratic states, the size of the winning coalition—the group of individuals needed to maintain the current regime—is large. Democratic leaders are therefore incentivized to provide public goods rather than private goods to those who support them. Other scholars taking a public choice perspective have claimed that democratic leaders are more vulnerable to sanctions because the more citizens that feel the pain of sanctions, the more democratic elites face public pressure (McGillivray and Smith 2000; Major 2012).

In autocratic states, where the size of the winning coalition is relatively small, the political elites are not concerned about ‘average citizens’, but instead worry about opposition from within their own coalitions (Wood 2008: 509). Due to lack of public constraints, autocratic leaders pass along the sanction-induced burdens to ordinary citizens without being held accountable. Marinov (2005) provides an empirical demonstration for this argument, showing that democratic leaders, constrained by their constituents, are far more likely to be removed than dictators, who are significantly freer from the public constraints.

Other research, however, posits that sanctions also may threaten a dictators’ tenure. For example, Major (2012) finds that dictators are vulnerable to sanctions if domestic instability, in response to sanctions, such as public demonstrations or riots, break out. Major argues that although mobilization of counter-elites is rare during normal time in autocracies, sanction-induced domestic political instability creates an opportunity for opposition groups to mobilize and eventually threaten an incumbent.

This argument was further extended by von Soest and Wahman (2015), who suggest that the destabilization effect of sanctions on autocratic leaders is based on the way that

sanction-induced economic stress limits dictators' co-optation strategy, traditionally an efficient survival tactic. Their finding shows that sanctions, if they explicitly aim to promote democratic changes, tend to increase the probabilities of irregular changes in authoritarian political elites by destabilizing the targeted authoritarian leaders.

Given the conflicting theoretical and empirical findings in the literature, complexity exists in our current understanding of the effect of sanctions on incumbents. One of the sources of this complexity is that existing research fails to acknowledge that a number of autocratic states also hold elections and fails to consider the effects of sanctions during these elections. Put differently, existing research unwittingly suggests that these elections are an irrelevant feature of this group of autocratic regimes.

This oversight misses the bigger picture. In fact, there is ample evidence to suggest that elections in authoritarian states are not unimportant. Howard and Roessler (2006) argue that the strategic decisions of opposition groups during elections in authoritarian states significantly affect not only the electoral process but also the election outcomes. Elections in authoritarian states are also important because they provide a platform for resource distribution. Indeed, the provision of patronage in return for loyalty during elections not only strengthens core supporters, but alleviates potential dissent (Gandhi and Przeworski 2007; Geddes 2006; Birch 2011).

Elections may therefore act as catalyzing events, depending on how economic sanctions shape domestic political environments. For example, sanctions may mobilize and embolden opposition groups during the election period by generating anti-regime movements among the population and by offering a signal of an international community's implicit or explicit support for the regime change. Moreover, sanctions can affect the amount of resources available for incumbents to distribute during elections. When incumbents rely on clientelistic relationships with their winning coalitions, the sanction-induced shortage of resources impairs them from mobilizing supporters.

Because elections can open a greater window of opportunities for incumbents, challengers, and the public, studying the effect of sanctions on an election can fill the gap in our current understanding of economic sanctions and an incumbent's hold on power. The following section proposes a causal mechanism explaining how sanctions may negatively affect an incumbent's vote share. More importantly, it proposes, contrary to prevailing wisdom, that autocrats are more vulnerable to sanctions during elections because sanctions limit autocrats' resources of vote-buying, and sanctions' tendency to mobilize opposition groups is significantly greater in autocracies than in democracies.

The Effects of Sanctions on an Incumbent during Elections

Since the theoretical foundations for vote and popularity functions emerged a half century ago (i.e., Campbell et al. 1960; Downs 1957; Key 1966), numerous studies in comparative voting behavior have found that economic hardships hurt an incumbent's popularity and vote share. Voters punish their incumbent in a given election either for their personal financial predicaments (i.e., Kiewiet 1983; Anderson 2000; Nannestad and Paldam 1997) or for a poor national economy (i.e., Kinder and Kiewiet 1981; Hibbs 1993). While a bulk of research demonstrate cross-national verification from established democracies, recent literature has also found that the economy plays an important role in voting and popularity in the transitional regimes of Central and East European countries (Lewis-Beck and Stegmaier 2008; Coffey 2013; Lippenyi et al. 2013), in Russia (Treisman 2011), in Latin American countries (Remmer 1991; Singer and Carlin 2013), in African countries (Bratton et al. 2012), and in global developing countries (Gelineau 2013). Since the economy is typically the most important problem for ordinary citizens (Singer 2011), the incumbent's electoral performance is likely to be a direct function of their managerial skill in handling the economy (Duch and Stevenson 2008).

Sanctions, on average, reduce the GNP of target countries by 3.3% (Hufbauer et al. 2008), and taking long-term growth and an inflation rates into account, they cause a real reduction in the overall wealth of a sanctioned economy (Peksen and Drury 2010). Sanctions would be more effective if they made political elites vulnerable by blocking compensation schemes such as trading with third-party states, foreign aid, and non-tax revenues (Hovi et al. 2005; Lektzian and Biglaiser 2013). Sanctions, however, have generally failed to exploit such potential vulnerabilities and instead political elites divert the cost of sanctions onto their populations. Unsurprisingly, the burden of economic sanctions is likely to fall on vulnerable civilians and to damage their socioeconomic status (Weiss et al. 1997; Weiss 1999; Peksen 2009). Consequently, incumbents who have invited sanctions, and thus, are deemed responsible for economic decline are punished at the polls¹. That being said, voters in all systems are responding to their economic well-being, even those in less democratic states. Following this discussion, the first hypothesis is formed as:

Hypothesis 1: *Economic sanctions diminish an incumbent's vote share in target countries.*

This research also argues that the magnitude of a sanctions' negative effect on an incumbent's vote share is heavier in electoral authoritarian regime. There are two reasons that sanction's negative effect is more pronounced in autocracies. First, autocrats might suffer at the ballot box when sanction-led economic hardships limit available resources to deliver as part of their co-optation strategies. In the democratization literature, it is widely recognized that economic difficulties destabilize authoritarian regime by splitting clientelistic relationships. von Soest and Wahman (2015: 960) point a seminal work by Bueno de Mesquita and Smith (2010), which shows that "regimes that rely on small winning coalitions (that is, most authoritarian regimes) have a significantly increased risk of regime collapse when growth is low". Instead, the growth-enhancing autocracies (i.e. Malaysia, Chile, Taiwan and Singapore) have shown that economic prosperity

boosts electoral dictatorship because voters tend to rally in support of the autocrats with fewer reasons for loyal supporters to defect from the incumbent. Because the economic structure of most authoritarian regimes is largely based on state-led sectors, and because economic sanctions toward these regimes are usually designed to disturb financial flows and availability to the state-owned economy, the sanction-led financial stress makes the incumbent's vote-buying strategy difficult for its loyal supporters, and consequently reduces electoral supports during elections.

It has been argued that financially strained leaders can maintain its stability by increasing levels of domestic repression (Wood 2008; Escriba-Folch 2012; Magaloni 2008), because autocrats rely on a mixed strategy of repression and co-optation (Magaloni 2008; von Soest and Wahman 2015). Although repression is a highly likely option, von Soest and Wahman point that it runs counter to some dominant arguments in democratization literature. They claim that although autocrats are likely to increase repression with lack of financial ability to co-opt counter elites, repression also bears risks of increasing opposition support and levels of popular uprising (von Soest and Wahman 2015; Lichbach 1987). Because of this risk, it is often considered that repression is a less sustainable option for regime survival in the long run than co-optation (Gandhi and Prezworski 2007; Bueno de Mesquita and Smith 2010).

Secondly, sanctions' negative effect on an incumbent's electoral performance is larger because sanctions create bigger dynamics such as mobilization among opposition groups and/or among the populations in autocracies than in democracies.

Opposition groups competing in authoritarian elections face a greater barrier to enter the electoral field, since elections are frequently rigged through various manipulation mechanics. Dictators draw more frequently from their "menu of manipulation" (Shedler 2006) in order to prevent electoral contests from escaping their control (Gandhi 2008). More importantly, elections in autocracies are characterized by *ex ante* uncertainty and *ex*

post uncertainty because the fact that incumbents will yield if they lose is not taken for granted (Gandhi 2008; Przeworski 1991).

The frequent use of electoral manipulation, together with the *ex post* uncertainty, are all discouraging factors that make the opposition groups weak and incoherent, and consequently prevent them from overcoming collective action problems. Furthermore, extremely low chances of winning an election make opposition groups more frustrated and sometimes render them irrelevant in an electoral contest. Even though repressed opposition groups often share a hope of achieving democratization, mobilization against government policies may not materialize unless there is an exogenous shock (Kaempfer and Lowenberg 1999).

Sanctions can serve as an exogenous shock for mobilization among domestic opposition groups in autocracies by acting as a catalyst for collective action². Frustrated opposition groups whose mobilization was believed to be meaningless may perceive sanctions as a signal that the international community desires leadership change. Moreover, when economic decline caused by sanctions are associated with democratic reasons (such as politically relevant sanctions), it is expected that sanctions send particularly strong signals to opposition groups (von Soest and Wahman 2015), and significantly affect their probability of mobilizing the masses in demand for political reform (Bueno de Mesquita and Smith 2010; von Soest and Wahman 2015).

Such momentum might not even require an opportunity for electoral victory; rising as a meaningful and substantive political entity could be a good reason for opposition groups to gather together during an election. Indeed, authoritarian leaders face a real threat of being removed if an oppositions group overcomes their collective action problems by mobilizing themselves into coalitions with other groups (Bertocchi and Spagat 2001; Acemoglu and Robinson 2006).

Two anecdotes illustrate how sanctions ignite mobilization among opposition groups and the mass in authoritarian regimes. In the late 1970s, Park Chung Hee, South Korea's authoritarian president, employed illegal and authoritarian measures, such as repressing his political opponents, violating human rights, and adopting non-democratic electoral rules as a tool to perpetuate his dictatorship. The U.S. Congress began to question American support for Park's regime and the skepticism of Park's government gained credence after President Carter took office in 1976. During his presidential campaign, Carter iterated that "[i]t should be made clear to the South Korean Government that its internal oppression is repugnant to our people, and undermines the support of our commitment in Seoul" (Choi 2017: 935). When the Carter administration imposed economic sanctions by cutting aid to Seoul and threatening a potential military sanction by withdrawing US military forces from the Korean Peninsula in 1976, it sent a clear signal about the US' anti-Park sentiment to both Park and his domestic opposition.

During this foreign policy crisis, Kim Dae Jung, one of the the South Korean opposition leaders, led 'The 3.1 Myung-Dong National Salvation for Democracy' with many other opposition leaders in demanding the release of political prisoners, freedom of the press, judicial independence, and, more importantly, the resignation of Park. Once democratic challenges led by coalitions of opposition groups gained strength, along with explicit help from Washington, the anti-government mobilization became more widespread by inciting public resistance toward Park's regime. This tension, however, was abruptly brought to an end by Park's assassination in 1979 (Choi 2017).

A similar effect may be observed in the presidential election in Zimbabwe that took place from March 9-11 in 2002. In preparation for the impending presidential election, Mugabe began to implement forceful occupation of land owned by white settlers—this resulted in great political instability. In response to this chaotic land reform, the US imposed its own targeted sanction on Mugabe and his inner circle on September 24, 2001. Four months later (on February 18, 2002), the EU also imposed a targeted sanction that

included a travel ban, asset freezing, and a prohibition on military exports to the country due to human right violations and illegitimate democratic standards. These two consecutive sanctions pitted Tavangirai, the leader of the Movement for Democratic Change (MDC), against President Mugabe during the campaign.

The EU argued that a “serious violations of human rights” prevented the vote from being free and fair, which legitimized Tavangirai and his party as being under oppression by the Zimbabwe African National Union-Patriotic Front (ZANU–PF)³. In that election, Tavangirai earned 42% of the vote while Mugabe was re-elected with 56%. Although the election did not lead to a power transition, it was the first time that the opposition candidate earned more than 10% of the vote in history. Indeed, Mugabe faced real electoral threats from emerging opposition groups during that time of economic crisis brought on by foreign sanctions.

Sanctions, however, do not serve as exogenous shocks in democracies the way that they do in autocracies.⁴ In democratic settings where free and fair elections are common, there are few or no institutional barriers that prevent opposition groups from running in elections. Even though political leaders can take advantage of their incumbency, this does not necessarily discourage the political participation of opposition groups. Moreover, opposition parties in democracies do not experience the same deep frustration of being permanent losers.

It is far more likely in a democracy, where competition is typically much higher, that an opposition party may emerge as a meaningful political alternative. More importantly, elections in democracies are characterized by *ex ante* uncertainty but *ex post* irreversibility because the incumbent consents to the possibility of losing (Przeworski 1991). When incumbents consent to the possibility of leaving office consistently, there is not much sanctions can add to this status quo. Moreover, elections in democracies tend to be reasonably close so the exogenous event cannot change too much on vote share (a type of ceiling

effect). Even if sanctions could increase an oppositions' mobilization efforts, this addition would not be as substantial in a democracy.

Furthermore, political parties in established democracies have strong bonds to certain social or ideological groups. Accordingly, coalitions and mobilization among opposition groups is more likely to be in line with established ideological positions. Though scholars, such as Gunther and Diamond (2001), argue that there has been a decline in organizationally thick mass-based parties and growth in organizationally thin electoralist parties, there is ample evidence to suggest that party identification is not only the single most significant factor in explaining vote choice (Schmitter 2001; Strom 2002), but also the most stable predictor of voting behavior (Thies 2002). When voter-party attachment is strong and stable, idiosyncratic events like sanctions have limited impact on party mobilization.

In sum, sanctions make the most efficient tool for autocrats' survivability, co-optation, less feasible. In additions, international support for opposition groups is revealed by sanctions, either through implicit symbolism or explicit support for regime change. These sanctions make frustrated and even suppressed oppositions stand up and actively participate in authoritarian elections. Sanctions, however, do not create a strong signal, such as regime change, and do not increase already viable opposition groups in democracies. Following this discussion, I argue that sanctions are more likely to invite electoral threats to autocratic incumbents than democratic ones. The second hypothesis is formed as follows:

***Hypothesis 2:** The negative influence of sanctions on an incumbent's vote share is greater in less-democratic countries.*

Research Design and Methods

Data and Variables

To test the two hypotheses, I examine a sample that consists of all executive elections⁵. The data includes 381 elections from 79 countries from 1972 to 2012. The unit of analysis is country-election-year. On average, there are five data points for each country because there are five election-years for each country. Because my argument is based on mobilization of opposition groups at the time of an election, I focus on multi-party elections in which opposition parties are allowed to run and are allowed to win votes for the chief executive office or seats in the national legislative assembly, although the electoral contests may be held on an uneven playing field⁶.

The outcome variable is *Government Vote* share. The level of vote share is a measure of the percentage of votes incumbents received in each election. For countries with multi-party coalition governments, I use the total share of the vote for all parties in the government coalition. Data on vote share come from the Database of Political Institutions of the World Bank (DPI 2012). For robustness, I also use the change in vote share from the previous election. It stands to reason that change in vote share captures changes over time and thus falls in line with the causal argument proposed above.

The Economic *Sanctions* variable serves as my key explanatory variable. It captures government-led economic coercion that restricts the exchange of goods and services, such as import-export limitation, creates investment bans, and initiates asset freezes. Economic sanctions also take the form of aid suspension and the prohibition of military technology transfer (Haufbauer et al. 2008). I obtained the data on the imposition of sanctions from the Threat and Imposition of Sanctions (TIES) dataset (Morgan, Bapat, and Kobayashi 2013).

The variable, *Sanctions*, is a dichotomous variable that is coded as 1 if a country is under economic sanctions.⁷ Based on the dynamic specifications, I use a one year lag of

Sanctions. Overall, during the study period, there are 117 observations of elections (about 16.3%) in which sanctions were either imposed or remained imposed from the previous year, as compared to 599 elections that were not affected by sanctions.⁸

It is also necessary to explore whether sanctions collectively imposed by multiple countries have a different influence on elections (Peksen 2014). To account for this, the models include the *Multiple Senders* variable. This variable takes the value from 1 (single sender) up to 5 (multiple senders). It is likely that sanctions imposed by multiple countries are more detrimental to an incumbent because they can ensure stricter enforcement of the coercion and, more importantly, convey the collective will of the international community.

I control for sanctions imposed by the United State using the *USA Sender* dummy variable in the model. It is obvious that US sanctions have been the most frequent and most dominant form of sanctions in the post-World War II era (Peksen 2009). In fact, the active engagement of the US in the world politics, together with her economic dominance, have led the US to rely heavily on economic sanctions as a means of coercive diplomacy.

Regarding the level of democracy, I use a one year lag of the *Democracy* variable from the Freedom House and Polity dataset to test the conditional hypothesis, *H2*. In operationalizing the *Democracy* variable, I rely on two procedures. First, the average of Freedom House (Political Rights and Civil Liberties) is converted to a scale of 0–10 and Polity (Polity2), imputed for missing values, is converted to a 0–10 scale. Second, these values are averaged into the combined variable of *Democracy*, ranging from 0 to 10 where 0 is the least democratic and 10 the most democratic. Hadenius and Teorell (2005) demonstrate that the averaged index outperforms all others in terms of validity and reliability.

To control for rival explanations, I include multiple control variables following the existing literature. First, I include changes in economic growth rate (*GDP Growth Rate*) in annual percent-constant US dollars. As it is stated in my theory, it has been persua-

sively argued that a good economy helps incumbents and a bad one hurts their electoral performance. *GDP Growth* rates are measured by the changes in economic growth rate compared to previous year.

I also include the natural log of *GDP per capita* to account for the effects of level of development across countries. According to classic modernization theory, the well-educated middle class in wealthy countries are more likely to demand a responsive government (Lipset 1959; Barro 1999). This increases electoral accountability in these countries. Both economic variables are from the World Bank data (2012).

A country's level of economic integration with the global market might also play an important role in the linkage between sanctions and ruling parties' vote share. It is more likely that a highly open economy would be affected once the flows of goods and services are blocked by sanction impositions, which may strengthen sanctions' effect on election outcomes. Conversely, sanctions can have a small effect on incumbents' electoral success in closed economies, where sanctions have less effects on the flow of goods and services. To capture the level of economic integration, I include *Trade* as a percentage of GDP, which is obtained from the World Development Indicators (WDI).

Accounting for *Ethnic Fractionalization* is also important for examining the extent of electoral disruption and political hardship that economic sanctions inflict. In African countries where the ethnic heterogeneity is readily apparent, Van de Walle (2003) observed that the party system is often characterized by a dominant and nationally supported incumbent party and weak and locally-oriented opposition parties. Given that a high degree of ethnic fractionalization will lead to a low level of party nationalization, Wahman (2015) argues that the effect of ethnic diversity on party nationalization would be asymmetric between ruling and opposition parties. Incumbents cope with ethnic heterogeneity by creating multiethnic coalitions, whereas smaller opposition parties rely on local co-ethnic appeals. Accordingly, a high level of ethnic heterogeneity will render the

opposition parties less competitive in national executive and legislative assembly elections. I use data from Alesina et al. (2013), which measures the probability that two randomly selected people from a given country will not share the same ethnic identity.

Opposition Fractionalization is an important predictor of an incumbent's electoral performance. Scholars argue that weak opposition parties have difficulty competing against formidable incumbents because they suffer from resource scarcity, which limits their ability to distribute patronage to their constituencies (Rakner and Van de Walle 2009; Scheiner 2006). In a country where opposition parties are highly fragmented, it would be difficult to form a coalition among opposition groups because large numbers of factions will exacerbate collective action problems. I use one year lag of this variable based on the dynamic specifications test. Data on opposition fractionalization are taken from the Database of Political Institutions (2012).

Finally, to explore a possible relationship between violence and election outcomes, I account for internal, interstate conflicts, and popular protest since senders often use sanctions to stop wars and to stabilize unrest. In addition, conflict engagement may increase the level of domestic grievances by inviting political repression and economic turmoil (Poe et al. 1999; Hafner-Burton and Tsutsui 2007). Thus, conflict may create detrimental conditions for incumbents during elections. I include ordinal variables, ranging from 0 (lower cases) to 3 (higher cases) for both *Civil War* and *Interstate War* that indicates the presence of conflict (UCDP/PRIO 2013). I use Banks and Wilson's (2012) data for the *Popular Protest* variable, which is a count of the number of anti-government mass protests, such as riots, strikes, and demonstrations. The summary statistics of variables are in Table A.2 in the appendix.

Equation (1) illustrates a conceptual model without the interaction term (*Sanction* x *Democracy*) for *H1*, and then with the interaction term for *H2*:

$$\begin{aligned}
\text{Government Vote}_{it} = & \alpha + \beta_1 \text{Vote}_{it-1} + \beta_2 \text{Sanction}_{it-1} + \beta_3 \text{Democracy}_{it-1} + \\
& \beta_4 \text{Sanction}_{it-1} \times \text{Democracy}_{it-1} + \beta_5 \text{Controls}_{it-1} + \varepsilon_{it} \quad (1)^9
\end{aligned}$$

Regarding dynamic specifications, I estimate a *dead start* model, a model that includes lags of the dependent and independent variables but not the contemporaneous values of the regressors (De Boef and Keele 2008). I arrived at this model based on the *general-to-specific* modeling strategy suggested by Hendry (1995)¹⁰. For potential serial correlation in the idiosyncratic error, I use Feasible Generalized Least Square (FGLS)¹¹ that allows estimation in the presence of AR(1) autocorrelation within panels.¹²

Before reporting the results, there is one methodological issue that requires particular attention. The sample used in this research consists of 79 countries with an average of about 5 time points. The spatial units are far more dominant than the temporal units (large N and small T). Due to the cross-sectional dominance in the sample, I suspect that there are unit-specific effects in the composite error terms. Put differently, there might be significant sources of political, cultural, and institutional heterogeneity that may affect the outcome variable in this sample. Scholars prefer fixed effects (FE) models to address this type of unobservable unit specific factors. However, using fixed effects models in panel data with an LDV yields biased coefficients when T is small—such is case in this dataset (Beck and Katz 2011; Nickell 1981). This is because it violates the principle of strict exogeneity, which assumes a zero correlation between the error terms and all covariates across an observed time period (Hsiao 1986; Wooldridge 2013).¹³ When T is small, a model with FE including an LDV will fail to meet this assumption (Wooldridge 2013: 384).

Given this methodological challenge, it is difficult to correct for all potential problems. All possible modeling approaches contain some form of limitation. For these reasons, I first test models including previous vote share (LDV). To reduce the threat of panel-

specific effects, regional dummies are included to account for the regional specific characteristics. For robustness, I also employ country-fixed effects (FE) models to address concern of the unobservable panel specific characteristics by using the change in vote share (ΔY) as the outcome variable where the inclusion of LDVs becomes unnecessary. The results of this robustness test are in Table A.3 in the appendix.

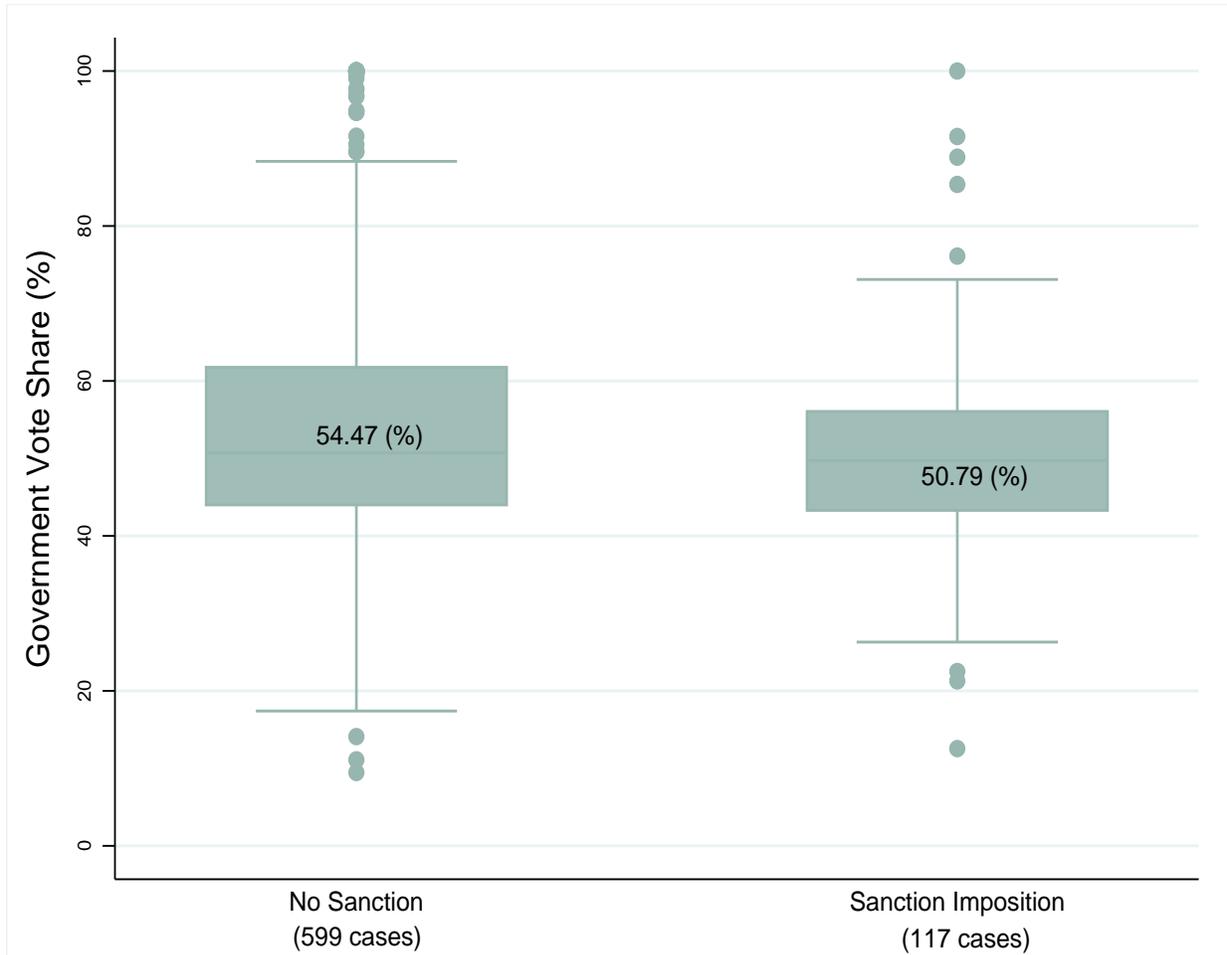
Results and Analysis

Figure 1 presents the bivariate relationship between sanctions and government vote share. The box-and-whisker plot shows the difference in distribution of incumbent vote shares across the absence and presence of sanctions. Even though the median values are not that different in each group, the difference of the upper line of the box indicating the 75th percent of the distribution is noticeable. The 75th distribution of government vote shares under sanction is much lower than those not sanctioned. More importantly, the mean values of government vote shares are different from each other.

While on average incumbents get 54.47% of votes under normal circumstances, sanctions decrease the average vote shares of government by about 3%. The difference of means test confirms that the mean values are statistically different from each other, suggesting that the bivariate relationship between sanctions and government vote shares is statistically significant and in the expected direction.

Table 1 presents the results of the Feasible Generalized Least Square (FGLS) regression. All models in this table use the incumbent vote shares as their outcome variable. Models 1 and 2 test the effect of sanctions on incumbent vote shares (H1). Models 3 and 4 attempt to test whether sanctions' effects on incumbent vote shares are conditioned on the level of democracy (H2). Model 2 and 4 include the regional dummies. The coefficients of the *Sanctions* variable are statistically significant with the expected negative sign in Model

Figure 1: Bivariate Relationship between Sanction and Government Vote Shares (%)



Note: Each number within the box indicates the mean of government vote shares (%). The *t*-test of difference of means test rejects the H_0 (diff = 0) in favor that the difference is greater than zero at 95% confidence level.

1 and 2. The imposition of sanctions tends to decrease incumbent vote share by about 3.27% in Model 1 (or 2.60% in Model 2). This supports hypothesis 1 in that sanctions hurt an incumbents' electoral performance, particularly their vote share.

To better illustrate the mechanism of my conditional hypothesis (H2), recall equation (1) in the previous section. As shown in the equation (1), β_2 represents the effect of *Sanctions* on vote share when the value of *Democracy* is equal to 0, and β_3 represents the effect of *Democracy* on vote shares when there is no sanction imposed. β_4 represents the interactive effect: holding *Sanctions* (*Democracy*) constant, increasing *Democracy* (*Sanctions*) produces this effect in the outcome variable. I expect the interactive coefficient to be greater than zero ($\beta_4 > 0$) because the negative effect of sanctions becomes less negative (moving toward zero) as the value of *Democracy* increases. Models 3 and 4 in Table 1 support this expectation. The coefficients for *Sanction* and *Democracy* are statistically significant with expected signs. More importantly, the interaction coefficient is positive and statistically significant (coefficient = 1.503; p -value < 0.001 in Model 4), suggesting that the marginal effect of *Sanctions* becomes less negative as *Democracy* increases. In other words, autocratic governments are significantly more vulnerable to sanctions during elections than democratic leaders.

Regarding the *Multiple Senders*, it is expected that sanctions imposed by multiple countries would drop incumbent vote share more substantively because they represent a collective will on behalf of the international community. Although tests on *Multiple Senders* fail to reject the null, it shows all negative sign across all models in Table 1, and some of them are very close to 90% significance level (i.e., p -values of *Multiple Sender* is about 0.11 in Model 4). Indeed, the coefficient of *Multiple Senders* becomes statistically significant at 90% confidence level (p -value < 0.10) in Model 5 in Table A.3 in the appendix. Similarly, as the *USA Sender* suggests, it seems that citizens do not respond to the origin of the sanction such as the US sanction when it comes to holding the elected officials accountable.

Table 1: The Effect of Sanctions on Government Vote: DV= Vote shares

Variable	Model 1	Model 2	Model 3	Model 4
Previous Vote Share	0.377*** (0.039)	0.353*** (0.039)	0.369*** (0.036)	0.339*** (0.038)
Sanction	-3.270** (1.272)	-2.601* (1.416)	-15.10*** (4.852)	-15.76*** (5.065)
Democracy	-1.181*** (0.274)	-1.147*** (0.299)	-1.303*** (0.270)	-1.376*** (0.298)
Sanction x Democracy			1.370** (0.560)	1.503*** (0.561)
Multiple Senders	-0.536 (0.535)	-0.672 (0.528)	-0.663 (0.542)	-0.796 (0.526)
USA Sender	0.129 (1.135)	-0.855 (1.404)	0.457 (1.121)	-0.375 (1.378)
GDP Growth Rate (%)	0.015 (0.107)	-0.007 (0.106)	0.017 (0.106)	0.007 (0.103)
GDP (per capita /log)	1.766*** (0.530)	1.993*** (0.724)	1.817*** (0.527)	2.301*** (0.728)
Trade (% of GDP)	0.020* (0.011)	0.017 (0.012)	0.018* (0.010)	0.016 (0.011)
Ethnic Fract.	5.853*** (2.042)	4.889** (2.293)	6.470*** (2.050)	5.450** (2.331)
Opposition Fract.	-2.540* (1.395)	-1.870 (1.663)	-2.617* (1.385)	-1.760 (1.688)
Interstate Armed Conflict	-0.278 (0.963)	-0.494 (0.959)	-0.377 (0.962)	-0.500 (0.956)
Civil War	-0.588 (0.546)	-0.981* (0.508)	-0.590 (0.528)	-0.956** (0.478)
Protest	-0.109 (0.123)	-0.114 (0.125)	-0.087 (0.122)	-0.069 (0.125)
Asia		0.525 (2.559)		-0.149 (2.548)
Latin America		-2.077 (2.115)		-1.598 (2.121)
Post Communist		-3.640 (2.280)		-3.911* (2.277)
Middle East/Northern Africa		0.332 (2.388)		0.177 (2.354)
West		-0.945 (2.013)		-0.991 (2.030)
Sub-Sahara Africa		7.564*** (2.216)		8.572*** (2.220)
Constant	23.58*** (5.526)	23.39*** (7.032)	24.51*** (5.472)	23.00*** (6.942)
Countries	79	79	79	79
Elections	381	381	381	381

Standard errors in parentheses, * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

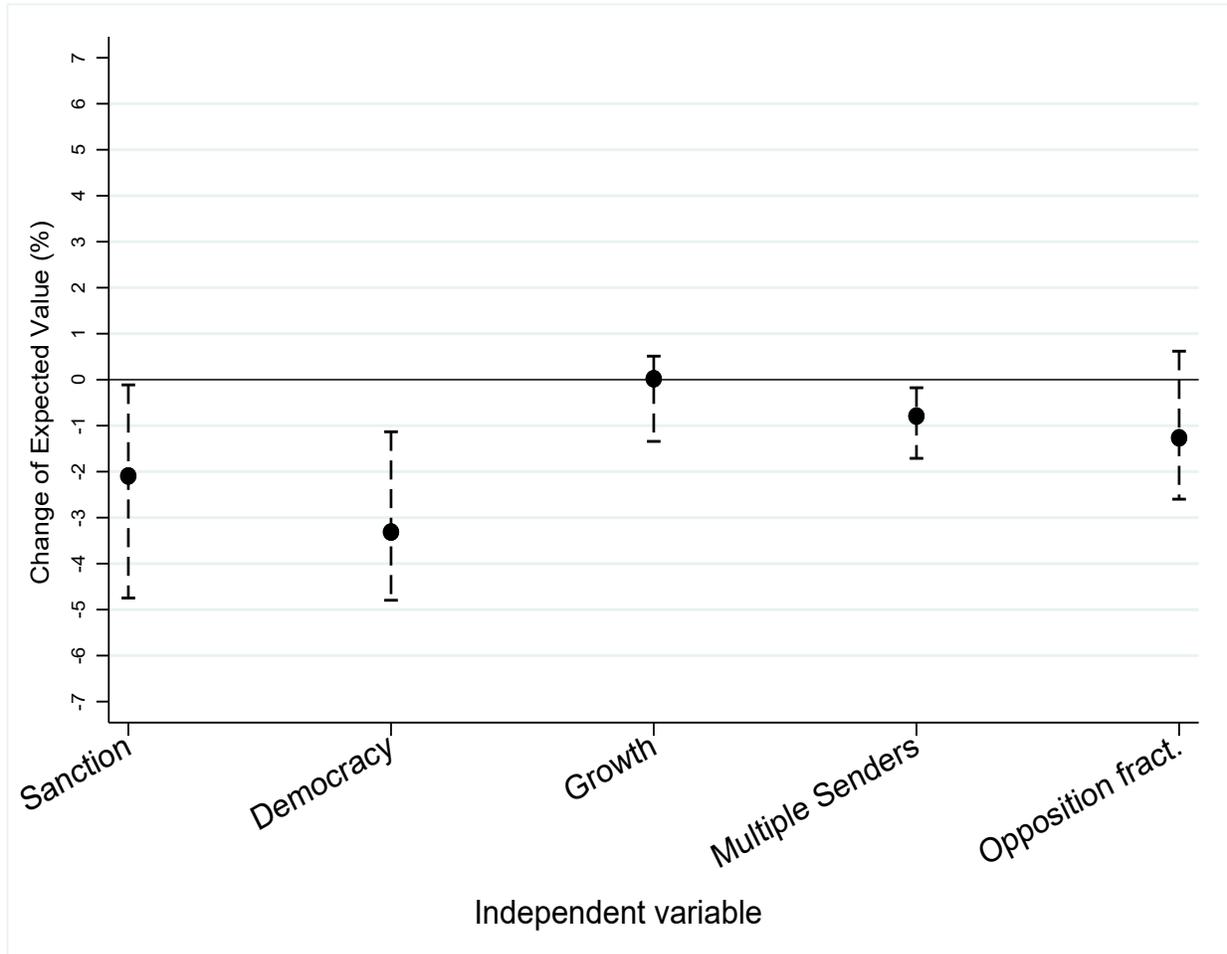
It appears in Table 1 that the more democratic countries are, the fewer votes the incumbents will receive across all Models. This is in part because democracy in general has stronger electoral accountability and greater electoral competition. Contrary to conventional wisdom, GDP growth does not affect the incumbents. It is possible that an incumbents' handling of foreign policy, and economic sanctions, can make economic issues less salient at the time of elections.

Ethnic Fractionalization is positively related with incumbents' electoral fortunes and the coefficients are statistically different from zero across all four models. If social cleavages prevail in a society, this makes existing factions less coherent and worsen the collective action problem among them. Accordingly, high levels of *Ethnic Fractionalization* benefit the ruling elites. Surprisingly, *Opposition Fractionalization* has the opposite of its expected sign, but the results are not robust across different models. Overall, *Civil War* tends to invite electoral punishment in Model 2 and 4, so voters hold their government accountable whereas *Interstate Conflict* and *Protest* appears to have no effect on the incumbent vote share across all models.

To highlight the average effect of *Sanctions* on *Government Vote* shares, I run statistical simulations using King, Tomz, and Wittenberg's (2000) *Clarify* software. Figure 2 shows the first difference of expected values of the outcome variable. These results indicate that sanctions have negative effects on the incumbent vote shares. If a country faces sanctions before an election, the expected vote share would decrease by about 2.2% on average, holding all other variables at their mean. The surrounding uncertainty levels (i.e., 90% confidence intervals) do not encompass zero, so sanctions' negative effect on vote shares is statistically significant.

To show the other covariates' effect on the outcome variable, I also include a subset of the control variables. Each of these controls varies from its 25th value to 75th value. *Democracy* appears to hurt the incumbent vote share, and it is statistically distinct from

Figure 2: Changes in Expected Value of Government Vote Shares, 90% CI



Note: The simulation is based on Model 1 in Table 2. Holding all other variables at their mean, the value of independent variables changes as follow: *Sanction* ($0 \rightarrow 1$), *Democracy*, *Growth Rate*, *Multiple Senders*, and *Opposition Fractionalization* ($p25 \rightarrow p75$).

zero. If the sanction is imposed by multiple countries (*Multiple Senders*), it tends to reduce the incumbent vote share and the effects are statistically significant. Changes in values of *Opposition Fractionalization* and *Growth* do not create a statistically significant influence on an incumbent's vote share.

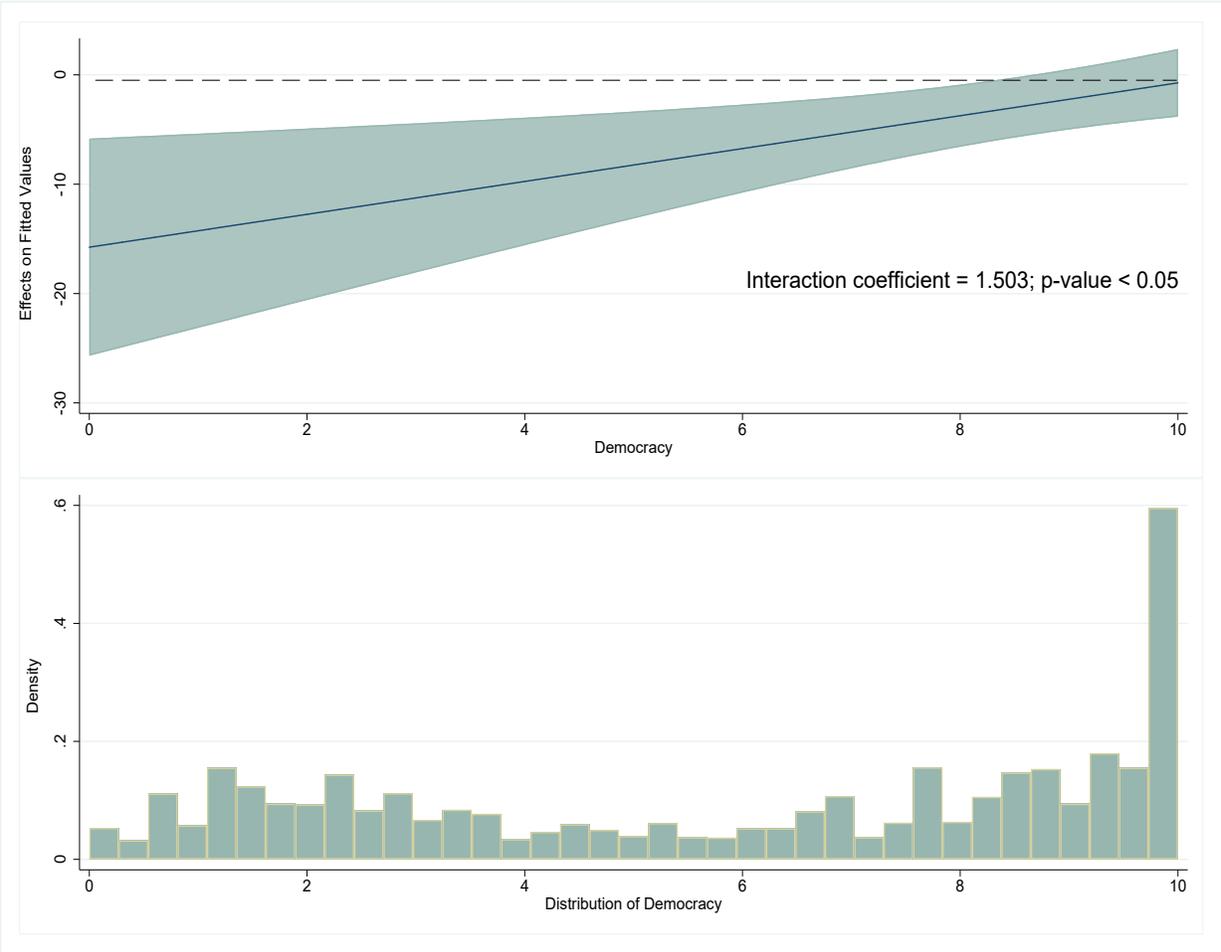
While Models 3 and 4 in Table 1 show strong prima facie support for H2, to determine the dynamic effects of the interacted variables it is necessary to plot the marginal effect of *Sanctions* on *Government Vote* share at various levels of the conditioning variable, *Democracy*. In Figure 3, the upper figure depicts the average marginal effect of economic sanctions on incumbent vote share with 95% confidence intervals. The figure at the bottom presents the distribution of elections across various levels of the democracy score.

It is clear that the larger proportion of the marginal effects graph is below the zero line and statistically significant when the value of *Democracy* is less than about 8.5 points. This confirms that sanctions affect the incumbent vote share negatively. However, when *Democracy* exceeds roughly 8.5, its marginal effect becomes statistically insignificant as the confidence intervals cross the zero line. Economic sanctions appear to have no effect on the incumbent vote share in established democracies.

The negative impact of sanctions on vote share is much greater in less-democratic countries. The upward slope of the graph implies that the magnitude of sanctions' negative effects becomes smaller as sanctions target more democratic countries. The confidence intervals at lower values of democracy and those of higher values of democracy do not overlap each other, and thus sanctions' effect on incumbent vote share is statistically different across regime types. Voters in less-democratic countries are more likely to use the electoral machine to punish their incumbent when economic sanctions are imposed in their countries.

Regarding the conditional hypothesis (H2), recent research by Major (2012) examines whether elections affect the success of sanctions. He hypothesizes that sanctions increase

Figure 3: Marginal Effect of Sanction on Government Vote Share, 95% CI



vulnerability in democracies when elections are approaching. Because democratic leaders are more constrained by popular desire, they are more likely to change their policies according to the demands of sender states. A dictators' vulnerability to sanctions, on the other hand, is unaffected by upcoming elections because they are less sensitive to what the public wants. However, the empirical test for his hypothesis does not support the argument and leads him to conclude that "not only does the hypothesis fail to find support here, but its opposite, that dictators are actually more vulnerable to sanctions in election years, finds support" (Major 2012: 93-94). My findings are consistent with what Major (2012) unexpectedly found. There is a logical explanation as to why sanctions have a larger negative effect on incumbent vote share in less democratic countries. Sanctions render co-optation strategy less available by limiting dictator's resources. Sanctions also create a powerful international signal that helps the opposition in non-democratic regimes to overcome the collective action problem and mobilize effective electoral challenges to incumbent governments.

Discussion

This research theorizes that voters, aggrieved by sanction-induced economic hardship, hold incumbents accountable for poor foreign policy performance, punishing them during elections. As incumbents lose their vote shares by inviting economic sanctions, opposition groups reap the electoral benefits. This reward-punishment mechanism is more pronounced in less democratic countries because sanctions during elections open a greater window of opportunity for once repressed opposition groups, and hurt clientistic relationships between dictators and their loyal supporters. The empirical findings from 381 multi-party elections, from 79 countries during the period of 1972-2012, support these theoretical expectations.

This research is relevant for various strands of scholarly work. Earlier studies showed that economic pressure generates political costs for the leaders it targets, destabilizes their hold on power (Marinov 2005), and reduces the tenure of their leadership (Escriba-Folch 2010). In this paper, I add to this literature by shedding light on the process of the destabilization of leadership and on the potential threat of being removed from office. Sanctions may destabilize an incumbent's hold on power by undermining their electoral performance in a given election.

Moreover, other scholars have found a positive correlation between democratic sanctions and increased levels of democracy in authoritarian countries (von Soest and Wahman 2015). I speak to this finding by showing that sanctions increase the risk of survivability of dictators, which can potentially increase the probability of improving democracy. My research also compliments recent findings that show a relationship between economic sanctions and dictator vulnerability. For example, sanctions appear to make a dictatorship vulnerable if they are imposed during a period of domestic instability (Major 2012). I suggest that elections under sanction-induced political and economic turmoil make targeted leaders vulnerable by offering a venue for voters to hold their incumbents accountable.

The findings related above have several important implications. First, sanctions have similar negative effects on an incumbent's electoral performance in democracies and non-democracies alike. Conventional wisdom suggests that sanctions impose political costs only on democratically elected leaders through well-established accountability mechanisms—and implicitly suggests that those mechanisms are not viable tools in autocracies. This research, however, shows that elections in autocracies can be conduits for dissatisfaction over political and economic difficulties caused by sanctions. This is in part because sanctions embolden opposition groups and mobilize the general public in autocracies, which leads them to participate at the polls. For example, sanctions helped Kim Dae Jung, a key opposition leader in South Korea, stand firm against Park Chung Hee's dictatorship and

helped Tavangirai emerge as the real threat to Zimbabwean dictator, Mugabe, during the presidential election in 2002. Sanctions may cause even authoritarian elections to function as accountability mechanisms.

Second, this research suggests that sanctions can be effective during elections. Regarding sanction' effectiveness, previous studies have explored a variety of conditions under which sanctions are *not* effective, focusing mainly on where they were targeted, to what extent sanctions should be severe, and what types of sanction technologies should be used. However, *when* sanctions can be effective in achieving their intended goal has been severely understudied. The findings of this research imply that economic sanctions work well when the vulnerability of targeted leaders is high and that elections, which offer a venue for electoral reward or punishment, can make incumbent vulnerable regarding their political foothold. Therefore, elections can make sanctions 'effective'.

Third, my findings suggest that the mobilization of opposition groups is important for electoral outcomes, especially in a repressive regime. Howard and Roessler (2006) have analyzed when and why elections in competitive authoritarian regimes usher in significant political liberalization. They find that the strategic decisions made by the opposition, in particular the decision to create a coalition or to jointly support a single candidate, can have a tremendous effect on the electoral process and its results. Future research is needed to specify the determinants of opposition coalitions. My work shows that the larger impact of such coalitions on political liberalization can be rapid and dramatic if once frustrated and repressed oppositions groups in authoritarian regimes perceive electoral prospects differently due to idiosyncratic shocks, such as economic sanctions.

Finally, this research also speaks to the literature on sanctions and democratization. Recent work has found that economic sanctions are frequently used to enhance the level of democracy in a target state. When sanctions are specifically designed to promote democracy, they achieved their intended outcomes (von Soest and Wahman 2015). More

generally, however, economic sanctions have also resulted in 'unintended' adverse consequences, delaying democratic transitions and undermining political and civil liberties (Peksen and Drury 2010). Currently, it is unclear whether sanctions pave the way for democratization, or enable autocrats to consolidate their hold on power. This ambiguity is partly attributable to one important component of democratization being left out of previous studies: elections. Elections are important because they lay out official and tangible mechanisms for holding incumbents accountable, although the effect of elections varies across different kinds of elections. Given that elections are a dynamic component that may move the democratization process forward or backward, my research contributes to a better understanding of the potential role of sanctions in democratization.

Notes

¹Given these findings, I further expect that economic costs caused by sanctions will increase political costs for the reigning government. More costly sanctions, such as comprehensive or extensive sanctions, may significantly detract from an incumbent's popularity and vote share as they cut most of the economic ties between target countries and senders. This results in more severe economic damage compared to moderate or less costly sanctions (Cortright and Lopez 2000; Peksen and Drury 2010). For a robustness purpose, I test the conditional effect of cost of sanction on vote share. Figure A.1 in the appendix presents the marginal effect of sanction on the incumbent vote share conditioned on the level of economic cost of the sanction. There is a clear negative effect of sanction on the incumbent vote share across all range of economic costs of sanction. More importantly, the negative effect becomes bigger as the economic cost of sanction increases from minor to severer, suggesting that political elites tend to pay more electoral costs (vote share) when the sanctions are expensive. The regression table (Table A.5) is available in online appendix.

²Earlier research shows that when sanctions are perceived as a threat to sovereignty and the regime's survival, this may strengthen incumbents' claim to legitimacy, which eventually create a "rally" effect for the regime (Grauvogel and von Soest 2014; Morgan 2015). However, sanctions may not produce a rally effect when they are triggered by an unpopular governmental policy. As illustrated below, anti-democratic measures such as human rights violations by President Park Chung Hee in South Korea did not experience a rally effect when the US imposed the economic sanction on Park's regime. However, when the US indirectly supported President Chun, who came after Park, and his hard-line decision to crack down the Kwangju Uprising— one of the most infamous event in South Korea's modern history which took place from May 18 to May 27, 1980—it had the "effect of pacifying the population", which allowed the dictator to reassert control without being concerned about the international costs of its anti-democratic policies (Lim 2014: 199).

³<https://www.globalpolicy.org/global-taxes/48950-zimbabwe-sanctions-weaken-democracy.html>

⁴For robustness, I also test if sanctions affect political mobilization such as mass protests, and if so, they do differently across regimes. I found that sanctions increase the mass protests and they do so more in autocracies than in democracies. This finding helps to clarify the chain of theoretical logics of this research.

⁵This includes presidential elections in the presidential systems and parliamentary elections in parliamentary systems.

⁶I adopt the regime classifications from Hadenius and Teorell (2007), which excludes cases of one party and no party regimes. The data are from Database of Political Institution (DPI).

⁷I also test above-stated hypotheses using politically relevant sanction cases by excluding any procedural sanctions such as improving environmental policies and trade practices. Empirical tests show the similar results, presented in Table A.4 in the appendix.

⁸In a multivariate analysis, there are sanctions in place in about 18.7% of the total election (427 elections).

⁹Some control variables are based on t . More discussion can be found in *Dynamic Specification* in the appendix.

¹⁰More detailed discussion on the dynamic specification is outlined in the appendix.

¹¹The FGLS equation can be illustrated as $\tilde{y}_t = (1 - \hat{\rho})\beta_0 + \beta_1\tilde{x}_{t1} + \dots + \beta_k\tilde{x}_{tk} + error_t$, where ρ is obtained by regressing the OLS residuals on their lagged counterparts such as \hat{u}_t on \hat{u}_{t-1} (Wooldridge 2013: 411).

¹²A model with FGLS fits well to the data, which have a large number of cross-sections (big N) but with each election observed only a few times (small T) (Greene 2012; Davidson and MacKinnon 1993).

¹³More specifically, 'strict exogeneity' assumes that the idiosyncratic error u_{it} should be uncorrelated with each explanatory variable across *all* time periods (i.e., $Cov(x_{itj}, u_{is}) = 0$, for all t, s , and j) (Wooldridge 2013: Chatper 13.5). This strict exogenous assumption "rules out cases where future explanatory variables

react to current changes in the idiosyncratic errors, as must be the case if x_{itj} is a lagged dependent variable” (Wooldridge 2013: 452).

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Table A.1: Restrictions of the ADL General Dynamic Model

Type	ADL Model	Restriction
General	$Y_t = \alpha_0 + \alpha_1 Y_{t-1} + \beta_0 X_t + \beta_1 X_{t-1} + \varepsilon_t$	None
Partial Adjustment	$Y_t = \alpha_0 + \alpha_1 Y_{t-1} + \beta_0 X_t + \varepsilon_t$	$\beta_1 = 0$
Static	$Y_t = \alpha_0 + \beta_0 X_t + \varepsilon_t$	$\alpha_1 = \beta_1 = 0$
Dead Start	$Y_t = \alpha_0 + \alpha_1 Y_{t-1} + \beta_1 X_{t-1} + \varepsilon_t$	$\beta_0 = 0$

Note: DeBoef and Keele (2008: 187)

A Appendix

Dynamic Specification

To arrive at the best dynamic specification for the relationship between government vote and sanctions, I apply the ‘general to specific’ modeling strategy suggested by Hendry (1995) and DeBoef and Keele (2008). With the baseline model, I include an arbitrarily large number of lags of all variables to consider higher order dynamic specifications. For instance, I include four years of lag for *sanction* variable (i.e., $t - 1, t - 2, t - 3$, and $t - 4$ of *sanction*) and two years of lag for all other variables. I then iteratively test restrictions on the general model. For each time a variable is removed in the general model, I check for serial correlation.

This strategy helps identify the model that best approximates the data generating process by choosing the model that is sufficient in that the model does not omit necessary lags such that there is un-modeled serial correlation in the residuals, and parsimonious, in that the model does not include any unnecessary lags. This test leads me to include one year lagged values of variables such as *vote share*, *sanction*, *democracy*, *GDP growth rate*, *trade*, *opposition fractionalization*, and *protest*, and contemporaneous values for *GDP per capita*, *ethnic fractionalization*, *international conflict*, *civil war*.

For robustness, I also follow the restrictions of the Autoregressive Distributed lag (ADL) General Dynamic Model, proposed by DeBoef and Keele (2008). Table A.1 shows the list of restrictions of the ADL General Dynamic Model. First, I begin with a general model, then apply each restriction, which is tested in the context of the ADL using t -tests or F -tests. To decide if the static model is consistent with the data generating process, I estimate the ADL and conduct a t -test on $\alpha_1 = \beta_1 = 0$. If I fail to reject the null, then I can proceed to draw inference from the static model, assured that the restriction is valid. If I reject the null, then I test alternate restrictions or proceed with an analysis of the general model (DeBoef and Keele 2008). The result of the restriction tests indicates that Dead Start is the best practice. More specifically, the t -tests reject the null of PA and Static models, but fail to reject the null of Dead Start, which suggests that the Dead Start specification is appropriate.

Table A.2: Summary Statistics

Variable	Mean	Std. Dev.	Min.	Max.	N
Government Vote Share ^a	53.872	16.791	9.47	100.0	716
Sanction ^b	.163	.369	0	1	716
Government Vote Share	50.992	12.927	12.55	97.73	427
Change in Vote Share	-3.085	16.026	-73.89	55.83	427
Sanction	.187	.390	0	1	427
Multiple Senders	.427	.869	0	5	427
USA Sender	.159	.366	0	1	427
Democracy	8.306	2.127	0	10	427
GDP Growth Rate (%)	3.006	4.296	-24.7	29.7	427
GDP per capital (log)	9.171	1.107	5.519	11.020	427
Trade (% of GDP)	74.896	48.231	12.677	360.857	427
Ethnic fract.	.347	.242	.001	.908	427
Opposition fract.	.450	.271	0	1	427
Interstate Armed Conflict	.082	.465	0	3	427
Civil War	.265	.730	0	3	427
Protest	1.246	3.242	0	37	427
Asia	.093	.292	0	1	427
Latin America	.166	.373	0	1	427
Post Communist	.119	.325	0	1	427
Middle East/ Northern Africa	.065	.248	0	1	427
West	.380	.486	0	1	427
Sub-Sahara Africa	.121	.316	0	1	427

N is different from the number of observation used in Table 2 due to lagged variables.
a and *b* are based on the bivariate test in Figure 1.

Table A.3: The Effect of Sanctions on Government Vote: DV= Change in vote shares (Fixed Effect)

Variable	Model 5	Model 6
Sanction	0.133 (1.889)	-19.831** (7.937)
Democracy	-1.171 (0.781)	-1.526* (0.840)
Sanction x Democracy		2.217** (0.856)
Multiple Senders	-1.203* (0.718)	-1.185 (0.732)
USA Sender	-2.344 (2.718)	-2.241 (2.777)
GDP Growth Rate (%)	0.068 (0.250)	0.091 (0.250)
GDP(per capita/log)	0.966 (3.616)	0.776 (3.617)
Trade	-0.067 (0.052)	-0.061 (0.048)
Opposition fract.	3.616 (5.581)	3.390 (5.603)
Interstate Armed Conflict	0.092 (0.760)	0.165 (0.768)
Civil War	-0.238 (2.098)	-0.244 (1.941)
Protest	-0.153 (0.313)	-0.118 (0.308)
Constant	4.101 (32.48)	8.634 (32.62)
Countries	99	99
Elections	401	401

Standard errors in parentheses, * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$
Ethnic fractionalization is omitted in Fixed Effects.

Table A.4: The Effect of Sanctions on Government Vote (using Political Sanctions)

Variable	Model 7	Model 8	Model 9	Model 10
Previous Vote Share	0.375*** (0.039)	0.350*** (0.039)	0.368*** (0.038)	0.340*** (0.038)
Sanction ^a	-2.988** (1.501)	-2.429 (1.553)	-17.03*** (5.415)	-18.22*** (5.577)
Democracy	-1.184*** (0.274)	-1.151*** (0.300)	-1.398*** (0.260)	-1.481*** (0.297)
Sanction x Democracy			1.674*** (0.641)	1.899*** (0.644)
Multiple Senders	-0.652 (0.556)	-0.770 (0.548)	-0.718 (0.555)	-0.837 (0.534)
USA Sender	-0.635 (1.157)	-1.506 (1.332)	-0.312 (1.106)	-1.184 (1.280)
GDP Growth Rate (%)	0.002 (0.108)	-0.019 (0.106)	0.003 (0.107)	-0.013 (0.103)
GDP (per capita/log)	1.769*** (0.538)	1.941*** (0.729)	1.922*** (0.529)	2.461*** (0.740)
Trade (% of GDP)	0.022** (0.011)	0.019* (0.026)	0.019* (0.011)	0.016 (0.012)
Ethnic fract.	6.086*** (2.099)	5.182** (2.374)	6.702*** (2.087)	5.678** (2.373)
Opposition fract.	-2.496* (1.402)	-1.879 (1.694)	-2.603* (1.380)	-2.052 (1.697)
Interstate Armed Conflict	-0.323 (0.972)	-0.523 (0.966)	-0.326 (0.967)	-0.459 (0.955)
Civil War	-0.563 (0.549)	-0.974* (0.523)	-0.643 (0.527)	-0.999** (0.486)
Protest	-0.107 (0.122)	-0.105 (0.124)	-0.0829 (0.121)	-0.0487 (0.124)
Asia		0.257 (2.598)		0.001 (2.584)
Latin America		-2.047 (2.145)		-1.416 (2.141)
Post Communist		-3.542 (2.312)		-3.531 (2.286)
Middle East or North Africa		0.544 (2.414)		0.400 (2.353)
West		-0.771 (2.052)		-0.724 (2.054)
Sub-Sahara Africa		7.568*** (2.218)		9.078*** (2.226)
Constant	23.39*** (5.538)	23.74*** (7.073)	24.26*** (5.480)	22.21*** (6.965)
Countries	79	79	79	79
Elections	381	381	381	381

^a: Include only political relevant sanction excluding procedural sanctions (i.g. trade)
Standard errors in parentheses, * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

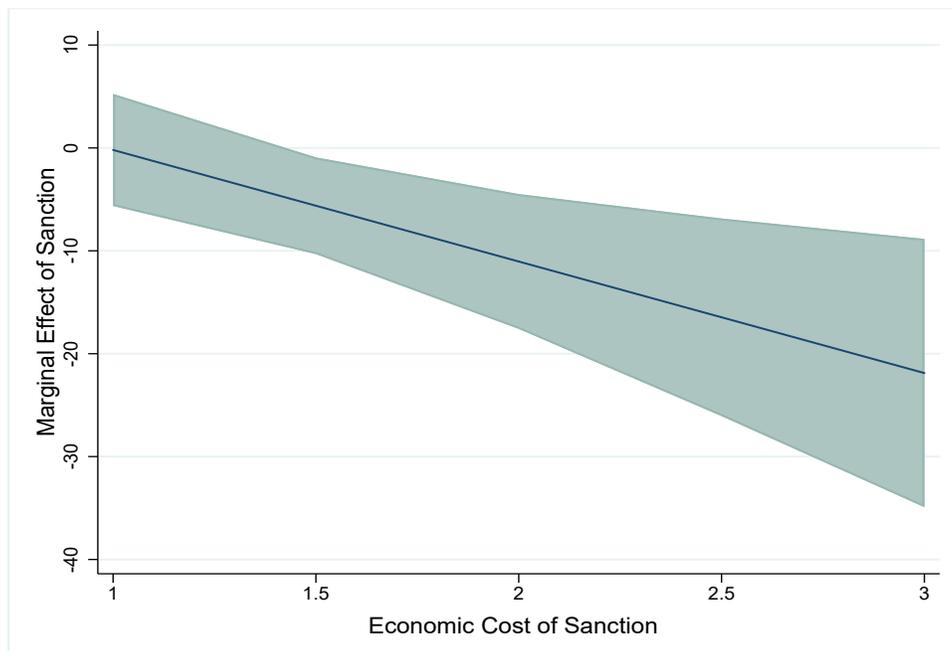
Table A.5: The Effect of Sanctions on Government Vote conditioned on the Cost of Sanction

	Model 11
Previous Vote Share	0.184*** (0.071)
Sanction	23.51 (18.29)
Democracy	0.232 (0.840)
Cost of Sanction	0.163 (2.142)
Sanction \times Democracy	-1.447 (1.809)
Sanction \times Cost of Sanction	-10.84*** (3.847)
Multiple Sender	-0.063 (0.600)
USA Sender	2.802 (2.430)
GDP Growth Rate (%)	0.049 (0.230)
GDP (per capita/log)	10.48*** (2.712)
Trade (% of GDP)	0.101*** (0.026)
Ethnic fract.	10.30** (4.357)
Opposition fract.	12.60*** (4.422)
Interstate Armed Conflict	0.823 (1.744)
Civil War	1.051 (1.338)
Protest	-0.005 (0.272)
Constant	-81.27*** (25.04)
Countries	19
Elections	61

Standard errors in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Figure A.1: Marginal Effect of Sanction on Government Vote Share (%)



Note: Economic costs of sanctions are coded as 1(minor), 2(major), and 3(severe) (Morgan et al. 2013). The full model of this marginal effect graph is available in Table A.5 in on-line appendix.