

## Timing and Targeting of State Repression in Authoritarian Elections

Tavishi Bhasin  
Department of Political Science  
Kennesaw State University  
(tbhasin@kennesaw.edu)

Jennifer Gandhi  
Department of Political Science  
Emory University  
(jgandh2@emory.edu)

### Abstract:

Autocrats face a fundamental tension: how to make elections appear credible (maintaining legitimacy) without losing control over outcomes (losing power). In this context, we claim that incumbents choose the timing and targets of state repression strategically. We expect that before elections, regimes will moderate their use of violence against ordinary citizens, while simultaneously directing state-sponsored repression towards opposition elites. Ordinary citizens are likely to experience greater repression after the election. We test these expectations using unique events-based repression data, conducting cross-national analysis of all presidential elections in authoritarian regimes from 1990 to 2008 to understand the timing and targeting of repression around elections under authoritarian regimes. In keeping with our expectations, we find that in the months prior and during the election, opposition leaders experience greater rates of repression than voters. We suspect that incumbents find it more effective to repress electoral challengers, since these pose a direct threat to their victory. Conversely, incumbents resist repressing voters whose support they need at the polls to win and to legitimize the election itself.

Paper to be presented at panel 44-23, titled 'The Causes and Consequences of Election Violence' during the annual meeting of the American Political Science Association in Chicago, August 2013. This paper has been accepted for publication and is forthcoming in *Electoral Studies* as part of a special issue on Electoral Integrity.

## I. Introduction

Since the end of the Cold War, the frequency of national-level elections has increased dramatically such that currently, only a handful of countries do not hold elections. In authoritarian regimes, incumbents came to power through means other than competitive elections and hence have no intention of losing power in these contests.<sup>1</sup> Yet the benefits that accrue to incumbents from holding elections depend on how far challengers and citizens agree to participate in them and accept their results. So autocrats must deal with a fundamental tension: how to make elections appear credible without losing control over their outcomes (Schedler 2006b).

In resolving this tension, incumbents have a number of instruments such as media dominance and electoral fraud (Schedler 2006a, Levitsky and Way 2010). One prominent instrument is the use of state-sponsored repression. Autocrats undoubtedly consider the costs of repressive action and its consequences, such as whether it suppresses support for the opposition or incites protest (Davis and Ward 1990, Gupta et al. 1993, Rasler 1996, Francisco 2005, Carey 2006). Yet in their use of violence, authoritarian incumbents must consider not only the decision to deploy violence, but the targets (against whom) and timing (when) of the violence.

We claim that in order to induce citizen participation within elections and still control their results, incumbents must choose the timing and targets of repression strategically, and these choices are linked. We expect that before elections, the regime will moderate its use of violence directed at ordinary citizens. In need of voter support, monitored by observers, and armed with alternative strategies for winning support (e.g., vote-buying), the incumbent government reduces its use of electoral repression against ordinary citizens as polling day approaches. The same is not true, however, in its treatment of opposition leaders and activists. State-sponsored repression is more intensely directed at opposition elites before the election, utilizing resources efficiently, to reduce campaigning and other efforts at mobilization by the opposition. If ordinary citizens are targeted by the state, we expect that they will experience repression only after the election.

Past cross-national studies suggest that national-level elections account for variation in the levels of state repression. National-level elections either have a negative contemporaneous association with levels of state repression (Davenport 1997) or the effects of elections on government violations of physical integrity appear in the years immediately after an election (Richards and Gelleny 2007). Due to the country-year format of the data in these studies, however, it is difficult to examine closely the timing of state-sponsored repression during the electoral process. In addition, no systematic studies have examined the targeting of state-led electoral violence.<sup>2</sup>

---

<sup>1</sup> We use the terms authoritarian regime and non-democracy interchangeably. In defining these regimes, we adopt a minimalist approach: authoritarian regimes are ones in which leaders came to power through means other than competitive elections, such as coups, revolutions, or hereditary succession.

<sup>2</sup> The effects of elections on broader forms of political violence such as riots and insurgencies are the focus of much scholarly attention (e.g., Walter 1999, Snyder 2000, Wilkinson 2006). Here we focus on violence initiated by the state in the form of repression against opposition groups and civilians to examine the strategic choices made by authoritarian dictators around elections.

With an innovative events-based dataset of repressive activity, we are able to examine the timing and targeting of opposition leaders and voters at the country-month level, with monthly indicators for the twelve months immediately preceding and following a national-level presidential election in about 60 countries with authoritarian regimes from 1990 to 2008. We find that the month of the election is the most violent during the 24-month period around the election. To the extent that pre-electoral violence occurs, it is directed towards opposition leaders and activists rather than citizens. During the electoral process, voters do not experience levels of repression that are very different from normal (i.e., levels experienced outside the 24-month electoral period). We use these findings to support that broader claim that the questions of *when, why, how much, and towards whom*, do states direct repression around election time are systematically related.

The paper proceeds as follows. The next section reviews the relevant literature on elections and repression. Section 3 presents our theoretical expectations about when, why, and towards whom authoritarian incumbents will direct repression around the time of an election. Section 4 reviews the unique events-based data that we use to analyze the timing and targeting of electoral repression. In Section 5, we discuss the results of our cross-national monthly analysis of all presidential elections in authoritarian regimes from 1990 to 2008. We conclude the paper with a brief summary of our findings, their significance for scholars and practitioners as well as ideas for future investigation.

## **2. The use of state-sponsored repression in elections**

Having risen to power through means other than competitive elections, authoritarian incumbents seek to reap the benefits of holding elections while minimizing the uncertainty of their results.<sup>3</sup> For incumbents, elections provide an occasion for the regime to mobilize the population by distributing benefits through government spending and vote-buying schemes (Lust-Okar 2006, Pepinsky 2007). This display of support among the population can be useful in preventing defections among the ruling elite (Magaloni 2006) and in fairly distributing the spoils of power among the elite (Blaydes 2011).

In order for elections to serve this consolidating function, incumbents, most obviously, must win them. But they must win elections in a way that still induces opposition parties to compete, voters to participate, and everyone to accept the results. If incumbents blatantly rig the process in their favor, the opposition might boycott (Beaulieu and Hyde 2009), and voters may stay at home. If the regime attempts to steal the election through fraud, it runs the risk of triggering post-electoral protests (Tucker 2007). As a result, elections force autocrats to balance the conflicting imperatives of electoral control and electoral credibility (Schedler 2006b: 5).

To achieve their goals, authoritarian incumbents have an array of strategies to choose from: manipulation of electoral rules, media dominance, vote-buying, and electoral fraud (Schedler 2006a, Levitsky and Way 2010). State-sponsored repression involves efforts of authorities to inhibit or suppress activity by dissidents (Tilly 2005). Examples of these efforts may include censorship of the press, restrictions on the civil liberties of citizens as well as physical sanctions such as imprisonment or torture of political activists. Repression is an obvious strategic tool for authoritarian incumbents trying to insure

---

<sup>3</sup> For a review of the reasons why authoritarian leaders hold elections, see Gandhi and Lust-Okar (2009).

electoral victories.<sup>4</sup> But the manner in which repression should be deployed – to balance the conflicting goals of electoral control and electoral credibility – is not obvious.

The evidence on the relationship between elections and the timing of state-sponsored repression is rather mixed. Country studies point to the existence of violent campaigns by the state both before and after elections. In Zimbabwe, for example, Bratton and Masunungure (2006) focus on the post-electoral violence of Operation Murambatsvina while Blair (2002) details the repeated use of terror by Mugabe's government in the run-up to polling day. Cross-national studies also provide a variety of findings. Davenport (1997) shows that in authoritarian regimes, the year of election is associated with a decline in censorship and political restrictions. In a sample of all countries (regardless of regime type), however, Richards and Gelleny (2007) find no contemporaneous association between elections and government respect for physical integrity rights. The effect appears, instead, during the year or two after the election: presidential elections are associated with lower post-electoral respect for human rights while legislative contests are associated with higher respect for these rights. While these studies suggest that there is important variation in the timing of state-sponsored repression, the country-year format of the data used in these analyses do not allow for a close examination of the state's use of violence in the period immediately preceding or following elections.

Similarly, there is little systematic evidence identifying the targets of state-sponsored violence around election time. One strain of literature examines the closeness of elections and use of state repression against opposition supporters. When incumbents expect elections to be closely contested, they have an incentive to deploy violence. The expected margin of victory may be small for two different reasons. The closeness of elections may be due to the presence of many undecided voters in which case the pre-electoral period contains much uncertainty. Robinson and Torvik (2009) argue that swing voters may, in fact, become targets of electoral violence if parties find them too expensive to persuade via ideological or material appeals. Alternatively, elections may be close because society is evenly polarized between pro-regime and pro-opposition supporters. In this case, there are few swing voters and little pre-electoral uncertainty, and so, incumbents target core supporters of opposition parties in an attempt to persuade them to stay at home (Collier and Vicente 2011, Bratton 2008, Chaturvedi 2005). These accounts suggest that repression decrease with the incumbents' expected popularity, but provide little clarity regarding the targets of repression, swing voters or opposition supporters.

Some studies also highlight that state-sponsored violence sometimes has unintended consequences. Collier and Vicente (2011) argue that incumbents may use violence to encourage opposition supporters to stay at home on election day but they must find the optimal level of violence because such tactics can induce their own soft supporters to abstain. Along the same lines, Bratton (2008) finds that pre-electoral repression strongly deterred turnout in the 2007 Nigerian elections but it also reduced the likelihood that voters would support the incumbent People's Democratic Party. Since more is not always better, incumbents need to prudently identify the targets of violence and carefully calibrate the amount of violence they use in order to maximize their support among the voting population or at least, minimize the show of support for opposition challengers.

In this paper, our interest lies in systematically examining some of the above identified gaps in the literature on the timing and targeting of electoral repression. We seek to clarify the timing (before,

---

<sup>4</sup> The state can coerce citizens by denying them material benefits, but here we focus only on restrictions on political and civil liberties and threats to physical integrity.

during or after the election) and targeting (broad citizenry versus opposition activists and supporters) of electoral repression as well as the interaction of these two factors. In the following section, we lay out our initial theoretical expectations regarding the timing and targeting of repression.

### **3. Theoretical expectations on the timing and targeting of repression**

We are interested in systematically studying the timing and targeting of state repression by incumbents around elections in dictatorships. We posit that the mixed results in the existing literature regarding the timing and targeting of repression is due to a lack of attention given to the interaction of these factors in the form of larger cross-national studies. We argue that there is a strong interaction between the timing and targeting of electoral repression. In order to clarify the timing and targeting of repression used by authoritarian incumbents, we need to look at how these two factors intersect around election periods. In terms of timing, we differentiate between the period leading up to the election from that following the election. As targets, we distinguish between ordinary citizens and opposition actors.<sup>5</sup> Citizens participate in the election process in their capacity as voters and may vary in the degree to which they support either the regime or its challengers. In contrast to ordinary citizens, opposition actors are decidedly not on the fence about how they view the incumbent. Opposition actors take a more active role in the electoral process: campaigning for office, mobilizing voters, and organizing protests and other acts of resistance (e.g., boycotts). We address the interaction of these targets and the two election periods – pre and post-electoral below. We use the examples of elections in Zimbabwe to illustrate our theoretical arguments.

#### **3.1 The pre-electoral period**

Zimbabwe's recent history has been marred by violence against the opposition under the ZANU-PF (Zimbabwe African National Union-Patriotic Front) who took control after the country's independence. Through the 1980s, ZANU-PF depicted the opposition and its leaders as rebels and quashed their supporters through ethnic massacres (Bratton et al. 2008). In 2000, the opposition party, Movement for Democratic Change (MDC) provided the ZANU-PF with a new popular challenge at the constitutional poll. Mugabe, afraid of defeat at the later parliamentary polls mobilized violent farm invasions against white farmers and business owners associated with the opposition (Mukambe 2009). In 2008, afraid of losing the runoff Presidential election to the MDC, the Mugabe regime used several state institutions to intimidate MDC supporters in the lead up to the elections. Tsvangirai, himself, was arrested several times in the lead up to the polls. Local human rights groups observed a sharp increase in political violence directed at the opposition with reports of political arrests, assaults and torture. Local NGOs observing the election reported that the police selectively used the Public Order and Security Act (POSA) to target opposition activists before the election, including using riot police and teargas to break up opposition demonstrations and rallies. From MDC accounts, more than 100 MDC supporters were killed and tens of thousands displaced in this pre-electoral violence. This use of state institutions to increase targeting of the opposition MDC's leaders and its supporters severely affected the opposition's ability to canvass support (Ploch 2008). Reflected in Zimbabwe's experience in both these polls, we see a clear pattern of a sharp increase in political violence directed at the opposition in the period leading up to the polls.

---

<sup>5</sup> We do not have data to distinguish between soft and hard supporters of the opposition to test some of the arguments about the effect of repression on voter choice and turnout (e.g., Collier and Vicente 2011). As a result, we concentrate on the distinction between voters and activists.

The above illustrative example highlights our expectations regarding the use of repression in the lead up to elections. We expect that pre-electoral intimidation and violence is directed towards opposition leaders rather than ordinary citizens. First, incumbents have other tools for winning elections, such as vote-buying, but these tools can be used to handle only voters, not opposition activists. Second, presumably the costs of repression are correlated with the size of the target population. Thus a concentration on intimidating opposition actors before the election, given their smaller numbers, is a more efficient use of the incumbent's resources. Third, repression directed at opposition actors also may be more effective. By targeting opposition leaders, the regime sends a clear signal to the wider citizenry that direct contestation can bring about punishment. Not only may this signal deter citizens from voting against the incumbent or becoming more active challengers of the regime, it also serves as a way of preventing voters from identifying with opposition actors. In singling out active members of the opposition with punishment, the regime casts opposition activists as trouble-makers. In sparing voters from much of the repression, the regime treats them differently to send a double-edged message: a warning to voters – You will be punished if you act like them – and a reassurance to voters – You will not be punished because you are not like them.

Finally, repression directed primarily at opposition actors limits the costs of this repression to these opposition actors. Tucker (2007) argues that the uncovering of widespread electoral fraud may serve as a focal point in part because citizens share in the feeling of having been victimized by the incumbent: a majority's preferences were equally violated by the practice of fraud. In this respect, electoral violence is quite different from electoral fraud in its capacity to mobilize citizens to collectively act against an authoritarian regime. Electoral repression directed at a small segment of the population – opposition actors – is less likely to become a focal point because if ordinary citizens are not repressed, they do not share in its costs. This leads us to our first hypothesis below.

H1: Authoritarian incumbents are likely to use greater levels of repression against opposition activists in the period leading up to the election than both the period after the election and that outside of the election year

### **3.2 The post-electoral period**

In contrast, during the post-electoral period when the regime no longer needs citizens to publicly demonstrate their fealty at the polls, there may be greater repression against citizens. This is evident in our illustrative case of Zimbabwe. After the 2005 parliamentary election, the Mugabe government in Zimbabwe became fearful of post-electoral protests over fraud and increasing prices. It launched Operation Murambatsvina, ostensibly a slum-clearance program in which the Zimbabwe Police Force brutally bulldozed the dwellings and informal markets of poor urban dwellers, displacing nearly 600,000 people initially (Potts 2008). Bratton and Masunungure (2006) show that while Movement for Democratic Change (i.e., opposition, MDC) supporters were more likely to be targeted in this operation, voters supportive of the regime party, ZANU-PF, also experienced the repression. What these targets had in common was that they tended to be urban youth whom the regime feared would become active in the protest movement after the election. By destroying their homes and livelihood and displacing them to rural areas, the regime sought to pre-empt protest by influencing the preferences and ability of young people to collectively act against the government. Interestingly voters who suffered the violence perceived it as a form of collective punishment for their support of the opposition in the legislative elections.

As the above case of Zimbabwe demonstrates, authoritarian incumbents practice much less restraint in the use of violence against the broader citizenry in the period following elections. As the cases of Iran and Uzbekistan demonstrate, post-electoral repression in response to protests can work – both to end the protests and to preserve the incumbent’s power (Beissinger 2007). We argue that incumbent governments who survive in power can use the state’s powers to widely punish opposition leaders and supporters *after* the election. Post-electoral repression is designed to respond to concrete outcomes. While opposition leaders may be subject to some harassment or imprisonment, repression in this period is also more broadly directed towards voters. This repression may be collective punishment for voters for not coming out in support of the incumbent or to deter or disperse protests that may emerge to question the results of the polls or electoral fraud in the election. This post-electoral violence is less restrained, as the regime no longer fears possible reprisal from citizens at the polls. This leads us to our second hypothesis regarding the timing and targeting of repression:

H2: Authoritarian incumbents are likely to use greater levels of repression against broader citizenry in the period after the election than both the period before the election and that outside of the election year.

### **3.3 Overall timing of repression**

Above we presented arguments on expected levels of repression against the opposition and broader citizens in the periods leading up to and following elections. In the period leading up to the election, we expect authoritarian incumbents to target opposition leaders and activists and not citizens at large, given concern about their supporters and swing voters turning out in the incumbents’ favor. In contrast, these incumbents are expected to inflict more widespread repression after the election when they no longer fear citizens’ votes against them at the polls. As the pre-electoral period sees greater levels of repression against a smaller range of targets – primarily the opposition and its activists, we expect the general level of repression to be lower in this pre-electoral period. On the other hand, incumbents are far less restrained in their use of repression in the post-electoral period, directing these acts at a broader swath of the populace to deter or reduce protests against election results or electoral fraud at the polls. Thus with the increased range of targets in the post-electoral period, we expect the general level of repression to be higher in the period following the election. We present below our third hypothesis regarding the overall timing of repression.

H3: Authoritarian incumbents are likely to use lower levels of repression in the period leading up to the election than both the period after the election and that outside of the election year.

We test the above hypotheses using novel data on repression in authoritarian countries. The following section explains the data used for our analysis.

## **4. Data**

We examine all countries that experienced an authoritarian presidential election during the years 1990 to 2008. Authoritarian presidential elections are those elections for the executive that were held under the auspices of an incumbent who came to power through non-democratic means (e.g., coup,

*autogolpe*).<sup>6</sup> We conduct our analysis on two samples, one consisting only of countries where incumbents did face challengers and one including countries where they did not face challengers. Countries remain in our sample for as long as they are governed by an authoritarian incumbent.<sup>7</sup> Thus, they drop out of our sample after a democratic election has taken place in the country. The unit of analysis is the country-month and all months are included for the country for all years for which it remains authoritarian between 1990 and 2008 to be able to compare levels of repression across election months and non-election months. A complete list of countries and years included in the analysis is available in Appendix VI.

To measure state-sponsored electoral repression, we use events data aggregated at the monthly level. These data are based on news reports extracted from the Reuters news database using the IDEA framework (Bond et al. 2003). The IDEA framework uses an automated program to extract information from the first few sentences of news reports and organizes them in a *who did what to whom* format. For each repression event, for example, we have information on the type of action taken (e.g., arrest, beating); the target of the action (e.g., opposition parties, ethnic group); and the identity of the perpetrator (e.g., police, military, national executive) which enables us to isolate actions committed by the state as opposed to opposition or private actors. The Reuters news database has over 200 bureaus around the world which allows for extensive coverage across regions. This is a strong advantage over other events datasets such as the Banks' *Cross National Time Series Archive* that depends on the *New York Times* with 11 U.S. and 26 international bureaus. Similar data based on the IDEA framework have been used in several recent studies (Bell et al. 2012, Murdie and Bhasin 2011).

Repression is defined as negative sanctions imposed by state actors against dissidents that raise the costs of dissent (Davenport 1997, Carey 2006). Repressive events, restricting dissident activity, range from censorship which is a lower end action that does not involve violence or threats to physical integrity rights to arrests, beatings and torture which are repressive actions that do.<sup>8</sup> We aggregate these events to the monthly level to create the sum of the number of repression events, *Repression*. We include only state-sponsored violence which is *not* associated with civil war. If the government, for example, sends the military to enjoin insurgents in a remote area, we do not include this action as we seek to determine the effect of elections on repression that occurs outside of the exceptional circumstances created by war.

To examine the targets of repression, we disaggregate the variable *Repression* into *Civilian repression* and *Opposition repression*. *Civilian repression* is a count variable that includes all repression events directed at groups of ordinary citizens, such as students, farmers, and educators. *Opposition repression*

---

<sup>6</sup> Following Cheibub et al. (2010), we also include those elections held under the auspices of a political party that has never lost power in at least three straight elections. These cases include Namibia, Nigeria, Russia, and Zambia.

<sup>7</sup> This means that if the opposition wins the election and there is a transition to democracy, the post-electoral months after the new democratic leader has taken office are not included in the sample.

<sup>8</sup> State officials include the national executive, legislators, the judiciary, sub-national officials, the police, and the military. A full list of the different types of repressive events included in the variable is included in Appendix I.



is the sum of all repressive events targeting active electoral challengers, such as political parties, opposition groups, and candidates.<sup>9</sup>

To examine the pattern of repression before and after a presidential election, we use a series of dichotomous indicators that keep track of time in relation to the election. *Election month* is a dummy variable that takes the value of 1 during the month the presidential election is held. In a majority run-off system, the variable refers to the timing of the first round. *Pre-election month n* where  $n = 1, 2, \dots, 6$ , indicates the number of months preceding the election month while *Post-election month n* where  $n = 1, 2, \dots, 6$  measures the number of month following the election month. If there is a second round, *Between rounds* is coded 1 for all months between the two rounds (including the month of the second round of polling). We have a strong theoretical expectation that the *Pre-election month* variable will be negatively associated with repression. Similarly, as periods between rounds are also leading up to a elections, we expect lower levels of repression during this period as well.

The IDEA framework also enables us to create a number of control variables for the analysis. First, we include the number of protests, summed by month, and distinguish between *Violent protest* (involving the threat or use of force) and *Non-violent protest* (not involving the use of force). Protest here is defined as active and organized claims made against a state by its citizens. Therefore, these are all domestic events that are directed against the state and its agents (Bhasin 2008, Murdie and Bhasin 2011). Violent protest events include actions such as the bombing of a government office or a small arms attack against a government official. Non-violent protest events include peaceful anti-government demonstrations and marches.

*Accommodation* is the sum of the positive incentives granted by the state. These include promises of concessions, such as assurances, and actual concessions such as pardons of political prisoners and relaxation of curfew. While this variable does not capture the material inducements that incumbents can offer to citizens through vote-buying and government programs, it does enable us to determine whether repressive strategies serve as substitutes or compliments to any political carrots the regime might offer (Moore 2000). We also disaggregate *Accommodation* into *Citizen accommodation* and *Opposition accommodation* depending on the target of the action using the same idea targets as for the repression variables (Appendix II).

The type of dictatorship may also affect the degree of repression used against the population. As specialists in violence, military leaders may be more likely to use intimidation and violence to pacify voters and opposition challengers. *Military* is a dichotomous indicator coded 1 if the incumbent leader is a member of the armed forces and 0 otherwise. The variable is created using country-year data from Gandhi (2008) and a variety of historical sources to determine the month when leaders came to power.

Economic conditions may indirectly influence the strategies that incumbents use in order to insure electoral victories. Wahman (2011) finds that opposition parties are more likely to unify their efforts in challenging authoritarian incumbents though coalitions when economic conditions are poor. In response, incumbents may resort to repressive tactics. To capture economic conditions, we use the World Bank's nominal, seasonally adjusted Consumer Price Index (*CPI*) which indicates the monthly change in prices of a typical basket of goods and services utilized by an average consumer (i.e., inflation

---

<sup>9</sup> Lists of the IDEA framework targets that we separate into the civilian and opposition categories are listed in Appendix II.

rate). While growth or unemployment rates would be ideal, (logged) *CPI* is the economic variable for which currently we can find the most observations at the monthly level. Summary statistics for all variables are included in Appendix III.

## 5. Empirical analysis

Because our dependent variables are count variables of repressive events, we use a negative binomial model to estimate the effect of our variables of interest.<sup>10</sup> We first examine hypothesis 3, the timing of electoral repression, to determine whether coercive actions are concentrated before or after the election (as hypothesized). Table 1 shows the results of analyses in which *Repression* is the dependent variable. All specifications include the lagged dependent variable to model serial correlation and random effects to take into account the panel nature of the data.

\*\*\* Table 1 here \*\*\*

### 5.1 The timing of repression

Table 1 shows three different models. For each model, the first column provides the coefficient and standard errors (in parentheses) while the second column provides the Incidence Rate Ratios (IRR) which illustrate the substantive effects of each right-hand side variable.<sup>11</sup> For a one-unit change in an independent variable of interest, the expected number of repressive events changes by the number provided as the IRR.

On the timing of electoral repression, the results from Models (1) and (2) are substantively similar. The difference between Models (1) and (2) is in what is coded as an election. In (1), all presidential elections – whether there are challengers or not – are coded as elections.<sup>12</sup> In (2), only those contests in which there are challengers on the ballot are coded as (semi-competitive) elections. Finally, Models (2) and (3) are similar in that we examine the timing of repression around only semi-competitive elections. Only their specifications differ: Model (3) includes the economic *CPI* measure which reduces the number of observations by almost one-half. The results on the timing of electoral repression are substantively similar across most models and in keeping with hypothesis 3: there is less state-sponsored violence

---

<sup>10</sup> A Poisson regression model usually is employed for count outcomes in which for a discrete random variable,  $Y$ , and observed frequencies,  $y_i$ ,  $i = 1, \dots, N$ , where  $y_i \geq 0$ , and regressors  $x_i$ ,  $\text{prob}(Y = y_i) = e^{-\lambda_i} \lambda_i^{y_i} / y_i!$ ,  $y = 0, 1, \dots$ ,  $\ln \lambda_i = x_i$ . Both the mean and the variance of  $y_i$  are characterized by a single parameter,  $\lambda_i$ . Yet in almost all the model specifications used here, tests for overdispersion indicate that this assumption cannot be satisfied. Additional tests (COUNTFIT) indicate that either a Zero-inflated or a regular negative binomial model would most efficiently fit the data. These models allow for the variance of the process to differ from the mean by including an additional parameter to reflect unobserved heterogeneity among observations (Greene 1997). Due to the country-month unit of analysis, we use negative binomial models for panel data.

<sup>11</sup> The IRR is calculated assuming that random effects are zero.

<sup>12</sup> Presidential elections may not involve challengers if the incumbent stands on the ballot alone or if challengers boycott the election.

during the fourth month (Models 1 and 2) and second month (Models 1-3) before the election and substantially more repression during the month of the election (Models 1-3). Because our data are aggregated at the monthly level, we cannot determine whether the spike in repression during the month of the election is occurring before or after the actual polling day.

Across Models (1) through (3), the control variables exhibit significant and consistent effects on the number of repressive events. Increasing protests – both violent and non-violent – are associated with greater levels of repression. Military incumbents commit 1.1 to 1.2 times the number of repressive events that civilian dictators do. Interestingly, accommodative gestures are positively correlated with repression, indicating that state-sanctioned violence and accommodation are complementary strategies. It may be that the incumbent appeases some groups and represses others. Finally, higher levels of inflation are associated with slightly more repressive activity.

In terms of the timing of electoral repression, Models (1) through (3) show that during the six-month pre-electoral period, there are some reductions in repression (in comparison to months outside of the six-month period before and after an election). The number of repressive events is significantly lower during the second and fourth months before an election. The IRR of *Pre-election month 2* shows that during the second month before the election, the expected number of repressive events is half the usual number. During the month of the election, however, there is a significant increase in state-sanctioned violence: the expected number of repressive events is 1.6 times the normal level. The six months after the election do not exhibit levels of repression significantly different from what would be observed outside of the electoral period. The coefficient on *Between rounds* which is not statistically different from zero shows that the same is true for the months between two electoral rounds.<sup>13</sup>

## 5.2 Timing of repression mediated by protest levels

Given that past research and our own results from Models (1) through (3) have shown a strong link between protest and repression, it may be that the timing of electoral repression is, in fact, driven by the amount of protest activity surrounding elections. The number of protests is, in fact, significantly greater during the month of the election.<sup>14</sup> Despite the effect of protest on repression, however, we expect that repression will still be lower during the pre-electoral period. We examine this idea by using interaction terms between our protest variables and each of the electoral timing dummies. These interaction terms capture the conditioning effect of our electoral timing dummies on the relationship between protest and repression: *Violent protest* should be positively correlated with repression, but its positive association should be mediated downwards by our pre-electoral dummies, *Pre-election month 1*, *Pre-election month 2*, etc...

The degree to which election timing moderates the state's repressive response to protests can be seen most effectively through graphical representations of the interaction effects where a significant effect is denoted by both confidence interval lines being below or above the zero line (Brambor, Clark and

---

<sup>13</sup> The substantive results do not change for this model (or for any other models in the paper) if we include the full set of 12-month pre-electoral and post-electoral time dummies. In addition, the substantive results hold if we include in the sample presidential elections in which there were no challengers.

<sup>14</sup> Months of the election experience 0.701 violent protests and 0.371 non-violent protests (versus 0.441 and 0.238, respectively, during non-election months). Two-tailed tests indicate  $p < 0.05$ .

Golder 2006). Figure 1 demonstrates how the marginal effect of being in the third month before the election on number of repressive events changes with the number of violent protests. It shows that the relationship between violent protest and repression is not significantly conditioned by timing during the third month before the election.

\*\*\* Figure 1 here \*\*\*

The story is very different, however if we look at two months before the election. Figure 2 illustrates how the marginal effect of the second pre-electoral month on repression varies by the different levels of protest.

\*\*\* Figure 2 here \*\*\*

In contrast to the first graph, Figure 2 shows a significant reduction of repression events in the second month before the election, and this effect is greater (i.e., fewer repression events) at higher levels of violent protest. Countries with about 22 counts of violent protest experience up to 4 fewer counts of repression two months before the election. Thus authoritarian leaders show greater restraint closer to the election even while experiencing high levels of violent protest. A comparison of the two graphs shows that the degree to which additional protest elicits a repressive response differs greatly depending upon the timing of this protest-repression dynamic in relation to the election. The coefficients and IRRs of the models with interaction terms can be found in Appendix V. As in our previous specifications, *Military* and *Accommodation* are usually positively associated with *Repression*.

### 5.3 Timing and targeting of repression

Next we examine the targets of electoral repression. We expect that if incumbents use pre-electoral repression, it will be directed mostly at active members of the opposition rather than ordinary citizens. Table 2 provides the results of models examining *Opposition repression* and *Citizen repression*. All models include the lagged dependent variable and random effects.

\*\*\* Table 2 here \*\*\*

Table 2 shows that when repression occurs during the months preceding and during an election, it is targeted at opposition leaders rather than voters, confirming the expectations of hypothesis 1. The first two columns of Table 2 with the results of the model in which *Opposition repression* is the dependent variable, show that four months before the election, opposition leaders experience 1.8 times the incident rate of repressive events experienced outside of the six-month period bookending the election. In contrast, during that same month, the state does not direct any greater than usual violence towards ordinary citizens (as shown by the results of the model in which *Civilian repression* is the dependent variable). Two months before the election, in fact, voters experience less than half the usual amount of intimidation and harassment, confirming the expectations of hypothesis 2.

The differences highlighted above are even more pronounced during the month of the election. Opposition activists experience three times the usual incident rate of repression while voters are not targeted at greater rates than usual. The month of the election has a particularly strong association with the amount of repression opposition leaders suffer: the IRR associated with *Election month* is almost three times higher than that of any other variable (including *Violent* or *Non-violent protest*). This meets

our main expectation in hypothesis 1 that authoritarian incumbents target opposition and their supporters with greater repression than civilians in the lead up to the election.

While the models in Table 2 provide support for hypotheses 1 and 2, separating repression directed at the opposition and civilians, in the months leading up to the election, we need more precise data to parse out the timing and targeting of repression during the month of the election. From Table 2, we know that the month of the election is the most repressive period for the opposition, but these models do not precisely indicate whether the violence occurs in the days before or after polling day as we aggregate the repression events for the election month.<sup>15</sup> To check whether our patterns of state-sponsored repression emerge even when we look more closely at the month of the election, we examine the mean number of repression events (divided by the number of days in the pre-polling day period) directed towards civilians versus the opposition. A one-tailed t-test indicates a statistically significant difference in these means (at the 0.01 level) with the average number of repression events directed towards civilians being lower than that targeted at opposition leaders. These results provide even greater support for hypotheses 1 and 2, underscoring the consistency of our findings regarding targets – civilians are targeted less by authoritarian incumbents than opposition supporters even when we look more closely at the days leading up to the election.

Table 2 also shows that distinguishing between the targets of violence reveals other important differences. Accommodative strategies go hand-in-hand with repression when the incumbent is dealing with the electoral opposition, but not when dealing with voters. In addition, voters experience 1.5 times the incident rate of repression under military rules than under civilian regimes. The rate of repression experienced by opposition leaders, however, is not significantly affected by the type of dictatorship.

## 6. Conclusions

We use novel data disaggregated by country-month and target that enables us to investigate the timing and targeting of state-sponsored electoral intimidation and violence more deeply. We find that repression generally decreases during some months prior to the election, but during the month of the election there is usually a spike upwards in state-directed violence. Disaggregating repression by its target, however, reveals that the regime incumbent treats actors differently. Opposition leaders experience greater rates of repression than voters both in the months prior and during the election. We argued that incumbents use their repressive resources strategically, choosing to target a smaller number of opposition candidates and supporters in the lead up to the election rather than the much larger citizenry. Conversely, incumbents resist repressing a broader range of voters whose support they need at the polls to win and to legitimize the election itself. Perhaps their approach to voters may entail more carrots – in the form of clientelist exchanges – rather than sticks. We also find that while incumbents practice restraint in targeting voters before elections, brazen post-electoral punishments, in the form of campaigns such as Operation Murambatsvina in Zimbabwe, are not the norm. The level of state-sponsored repression in the immediate twelve months after the election is not significantly different from that experienced outside of the electoral cycle.

---

<sup>15</sup> For example, if the election occurs on the 15<sup>th</sup> of the month, we cannot be certain as to whether most of the state-sponsored repression happens in the 1-2 week period before or after polling day.

These results highlight the importance of disaggregating repressive actions by timing and by target not only to yield more accurate empirical patterns, but also to encourage scholars to consider the strategic side of repression. We claim that the timing and targeting of state-sponsored repression are related for important theoretical reasons. Similarly, the timing of intimidation and harassment in relation to the election may vary according to the types of repression governments employ (Laakso 2007). The actual perpetrators of electoral repression also differ. State-sanctioned violence can be carried out by the military, the police, paramilitary groups, or temporarily-recruited youths. The relationship between the identity of the perpetrators and other features of electoral repression (e.g., timing, target, type) deserve further consideration.

Our results also show that incumbents attempting to stay in power do not use accommodative and repressive strategies as substitutes for each other, in contrast to the findings in other studies (Moore 2000). Our measure of accommodation captures the degree to which the government offers an olive branch and attempts to co-opt the opposition and wider citizenry through political liberalization (e.g., lifting of curfews and prohibitions on speech, amnesties). In all of our results, the degree of political accommodation is positively associated with state-sponsored repression (aimed at either opposition leaders or voters, respectively). Material inducements are another form of accommodation. We do not have a direct measure of material incentives at the monthly-level that enable us to examine their direct effect on the use of repression, but perhaps the results concerning inflation (i.e., *CPI*) provide us with some leverage. We conceptualized inflation as a measure of economic conditions, but it also may be tied to government spending. To the extent that higher inflation is a reflection of increased government spending (used to buy electoral support), our results indicate that repression is compatible with material accommodation as well. Why this is the case, and the conditions under which repression and accommodation act as complements, require further investigation.

This paper provides a unique, detailed cross-national look at repression under authoritarian regimes around elections. A better understanding of the strategies, timing and targeting of repression during the electoral process is of interest not only to scholars studying authoritarian regimes, but also to practitioners such election monitoring agencies and human rights non-governmental organizations (HROs) seeking to pressure authoritarian incumbents to improve their human rights practices. These strategic actors also look to use their limited resources efficiently, which could be aided by the knowledge that repressive actions are most intensely used in the months leading up to and the month of the election. In addition, these HRO resources would be best directed at reporting on and working with opposition candidates in the lead up to these elections as these are more likely targets than general citizens.

## References

- Bell, Sam K. Chad Clay, and Amanda Murdie. 2012. "Neighborhood Watch: Spatial Effects of Human Rights INGOs" *Journal of Politics*. 74(2): 1-16.
- Beaulieu, E. and S. Hyde. 2009. In the Shadow of Democracy Promotion. *Comparative Political Studies* 42 (3): 392-415.
- Blair, D. 2002. *Degrees in Violence: Robert Mugabe and the Struggle for Power in Zimbabwe*. London: Continuum.
- Blaydes, L. 2011. *Elections and Distributive Politics in Mubarak's Egypt*. New York: Cambridge University Press.
- Bond, D., J. Bond, et al. 2003. Integrated Data for Events Analysis (IDEA): An Event Form Typology for Automated Events Data Development. *The Journal of Peace Research* 40 (6): 733-745.
- Bratton, M. 2008. Vote Buying and Violence in Nigerian Election Campaigns. *Electoral Studies* 27: 621-632.
- Bratton, M. and E. Masunungure. 2006. Popular Reactions to State Repression: Operation Murambatsvina in Zimbabwe. *African Affairs* 106/422: 21-45.
- Bratton, M. and E. Masunungure. 2008. Zimbabwe's Long Agony. *Electoral Studies*. 19(4): 41-55.
- Carey, S. 2006. The Dynamic Relationship between Protest and Repression. *Political Research Quarterly* 59 (1): 1-11.
- Chaturvedi, A. 2005. Rigging Elections with Violence. *Public Choice* 125 (1/2): 189-202.
- Cheibub, J. A., J. Gandhi, and J. Vreeland. 2010. Democracy and Dictatorship Revisited. *Public Choice* 143 (1-2): 67-101.
- Collier, P. and P. Vicente. 2011. Violence, Bribery, and Fraud: the Political Economy of Elections in Sub-Saharan Africa. *Public Choice* (Online first: DOI 10.1007/s11127-011-9777-z): 1-31.
- Davenport, Christian. 1997. From Ballots to Bullets: an Empirical Assessment of How National Elections Influence State Uses of Political Repression. *Electoral Studies* 16 (4): 517-540.
- Davenport, C. and D. A. Armstron. 2004. Democracy and the Violation of Human Rights: A Statistical Analysis from 1976 to 1996. *American Journal of Political Science* 48(3): 538-554.
- Francisco, Ronald A. 2005. A Dictator's Dilemma. in *Repression and Mobilization* edited by Christian Davenport, Hank Johnston and Carol Mueller. Minneapolis: University of Minnesota Press.
- Davis, D. R. and M. D. Ward. 1990. They Dance Alone: Deaths and the Disappeared in Contemporary Chile. *The Journal of Conflict Resolution* 34(3): 449-475.

- Gandhi, J. 2008. *Political Institutions under Dictatorship*. Cambridge: Cambridge University Press.
- Gandhi, J. and E. Lust-Okar. 2009. Elections under Authoritarianism. *Annual Review of Political Science* 12: 403-422.
- Greene, W. 1997. *Econometric Analysis*. 3<sup>rd</sup> edition. Upper Saddle River, NJ: Prentice Hall.
- Gupta, D. K., H.R Singh and T. Sprague. 1993. Government Coercion of Dissidents: Deterrence or Provocation? *Journal of Conflict Resolution* 37: 301-339.
- Hyde, S. 2011. *The Pseudo-Democrat's Dilemma: Why Election Observation Became an International Norm*. Ithaca, NY: Cornell University Press.
- Kelley, J. 2012. *Monitoring Democracy: When International Election Observation Works, and Why It Often Fails*. Princeton: Princeton University Press.
- Laakso, L. 2007. Insights into Electoral Violence in Africa. In *Votes, Money and Violence: Political Parties and Elections in Sub-Saharan Africa*, edited by Basedau, Matthias, Gero Erdman, and Andreas Mehler. Sweden: Nordiska Afrikainstitutet. pp.224-252.
- Levitsky, S. and L. A. Way. 2010. *Competitive Authoritarianism: Hybrid Regimes After the Cold War*. New York: Cambridge University Press.
- Lust-Okar, E. 2006. Elections under Authoritarianism: Preliminary Lessons from Jordan. *Democratization* 13 (3): 456-471.
- Magaloni, B. 2006. *Voting for Autocracy: Hegemonic Party Survival and its Demise in Mexico*. New York: Cambridge University Press.
- Makumbe, John. 2009 September. The Impact of Democracy in Zimbabwe. Assessing Political, Social and Economic Developments Since the Dawn of Democracy. Report 119, Centre for Policy Studies, Johannesburg, South Africa.
- Moore, D. 2008. Coercion, Consent, Context: Operation Murambatsvina & ZANU(PF)'s Illusory Quest for Hegemony. In *The Hidden Dimensions of Operation Murambatsvina in Zimbabwe*, edited by Maurice Vambe. Harare, Zimbabwe: Weaver Press. pp.25-39.
- Moore, W. 2000. The Repression of Dissent: A Substitution Model of Government Coercion. *Journal of Conflict Resolution* 44 (1).
- Murdie, A. and T. Bhasin. 2011. Aiding and Abetting? Human Rights INGOs and Domestic Anti-Government Protest *Journal of Conflict Resolution* 55 (2): 163-191.
- Pepinsky, T. 2007. Autocracy, Elections, and Fiscal Policy: Evidence from Malaysia. *Studies in Comparative International Development* 42 (1-2): 136-163.
- Ploch, Lauren. 2008 September. Zimbabwe: 2008 Elections and Implications for U.S. Policy. Library of Congress. Washington D.C. Congressional Research Service.



- Potts, D. 2008. Displacement & Livelihoods: The Longer-term Impacts of Operation Murambatsvina. In *The Hidden Dimensions of Operation Murambatsvina in Zimbabwe*, edited by Maurice Vambe. Harare, Zimbabwe: Weaver Press. pp.53-64.
- Rasler, K. 1996. Concessions, Repression, and Political Protest in the Iranian Revolution. *American Sociological Review* 61: 132-152.
- Richards, D. and R. Gelleny. 2007. Good Things to Those Who Wait? National Elections and Government Respect for Human Rights. *Journal of Peace Research* 44 (4): 505-523.
- Robinson, J. and R. Torvik. 2009. The Real Swing Voter's Curse. *American Economic Review: Papers & Proceedings* 99 (2): 310-315.
- Schedler, A. ed. 2006a. *Electoral Authoritarianism: The Dynamics of Unfree Competition*. Boulder, CO: Lynne Rienner.
- Schedler, A. 2006b. Patterns of Repression and Manipulation: Towards a Topography of Authoritarian Elections, 1980-2002. CIDE Working Paper Number 189.
- Snyder, J. 2000. *From Voting to Violence: Democratization and Nationalist Conflict*. New York: W.W. Norton.
- Tilly, C. 2005. Repression, Mobilization, and Explanation. In *Repression and Mobilization*, edited by Christian Davenport, Hank Johnston and Carol Mueller. Minneapolis: University of Minnesota Press.
- Tucker, J. 2007. Enough! Electoral Fraud, Collective Action Problems, and Post-Communist Colored Revolutions. *Perspectives on Politics* 5 (3): 535-551.
- Wahman, M. 2011. Offices and Policies – Why do Oppositional Parties Form Pre-Electoral Coalitions in Competitive Authoritarian Regimes? *Electoral Studies* 30: 642-657.
- Walter, B. 1999. Designing Transitions from Civil War. *International Security* 24 (1): 127-155.
- Wilkinson, Steven I. 2006. *Votes and Violence: Electoral Competition and Ethnic Riots in India*. Cambridge: Cambridge University Press.

**Table 1: The Timing of Repression**

Dependent variable	Repression					
	(1)		(2)		(3)	
Model	Coefficient	IRR	Coefficient	IRR	Coefficient	IRR
<i>Lagged dependent variable</i>	0.036*** (0.002)	1.037*** (0.002)	0.036*** (0.002)	1.037*** (0.002)	0.031*** (0.002)	1.031*** (0.003)
<i>Pre-election month 6</i>	0.079 (0.106)	1.082 (0.115)	0.142 (0.110)	1.152 (0.127)	0.185 (0.120)	1.203 (0.144)
<i>Pre-election month 5</i>	-0.006 (0.109)	0.994 (0.109)	0.021 (0.113)	1.021 (0.115)	0.076 (0.123)	1.079 (0.133)
<i>Pre-election month 4</i>	-0.256** (0.117)	0.774** (0.091)	-0.254** (0.122)	0.776** (0.095)	-0.172 (0.134)	0.841 (0.113)
<i>Pre-election month 3</i>	0.008 (0.107)	1.008 (0.108)	0.013 (0.112)	1.013 (0.113)	0.083 (0.123)	1.086 (0.133)
<i>Pre-election month 2</i>	-0.560*** (0.119)	0.571*** (0.068)	-0.579*** (0.125)	0.560*** (0.070)	-0.434*** (0.136)	0.648*** (0.088)
<i>Pre-election month 1</i>	0.116 (0.101)	1.123 (0.113)	0.178* (0.103)	1.194* (0.123)	0.126 (0.120)	1.135 (0.136)
<i>Election month</i>	0.487*** (0.084)	1.628*** (0.136)	0.530*** (0.086)	1.699*** (0.146)	0.563*** (0.095)	1.755*** (0.166)
<i>Post-election month 1</i>	-0.048 (0.119)	0.953 (0.114)	-0.045 (0.127)	0.956 (0.121)	0.021 (0.137)	1.021 (0.140)
<i>Post-election month 2</i>	-0.178 (0.116)	0.837 (0.097)	-0.151 (0.121)	0.860 (0.104)	0.001 (0.128)	1.001 (0.128)
<i>Post-election month 3</i>	-0.111 (0.124)	0.895 (0.111)	-0.049 (0.127)	0.952 (0.121)	-0.074 (0.146)	0.929 (0.135)
<i>Post-election month 4</i>	0.141 (0.112)	1.151 (0.128)	0.085 (0.122)	1.089 (0.133)	-0.050 (0.146)	0.951 (0.139)
<i>Post-election month 5</i>	-0.041 (0.119)	0.960 (0.114)	-0.014 (0.128)	0.986 (0.126)	-0.085 (0.150)	0.919 (0.138)
<i>Post-election month 6</i>	0.088 (0.110)	1.092 (0.120)	0.078 (0.118)	1.081 (0.127)	0.124 (0.135)	1.131 (0.153)
<i>Between rounds</i>	0.136 (0.256)	1.146 (0.294)	0.125 (0.258)	1.134 (0.292)	0.027 (0.266)	1.027 (0.273)
<i>Violent protest</i>	0.080*** (0.005)	1.083*** (0.005)	0.080*** (0.005)	1.083*** (0.005)	0.064*** (0.005)	1.066*** (0.005)
<i>Non-violent protest</i>	0.076*** (0.009)	1.079*** (0.010)	0.076*** (0.009)	1.079*** (0.010)	0.067*** (0.010)	1.070*** (0.011)
<i>CPI</i>					0.057*** (0.011)	1.059*** (0.011)
<i>Military</i>	0.137*** (0.051)	1.147*** (0.058)	0.136*** (0.051)	1.146*** (0.058)	0.206*** (0.059)	1.229*** (0.073)
<i>Accommodation</i>	0.048*** (0.006)	1.049*** (0.006)	0.048*** (0.006)	1.049*** (0.006)	0.042*** (0.008)	1.043*** (0.008)
Constant	-0.487*** (0.036)	0.614*** (0.022)	-0.490*** (0.036)	0.613*** (0.022)	-0.375*** (0.054)	0.687*** (0.037)
Number of obs.	10,853		10,853		5,761	
Number of countries	61		61		42	
Wald X <sup>2</sup>	2472.91***		2473.43***		1346.78***	

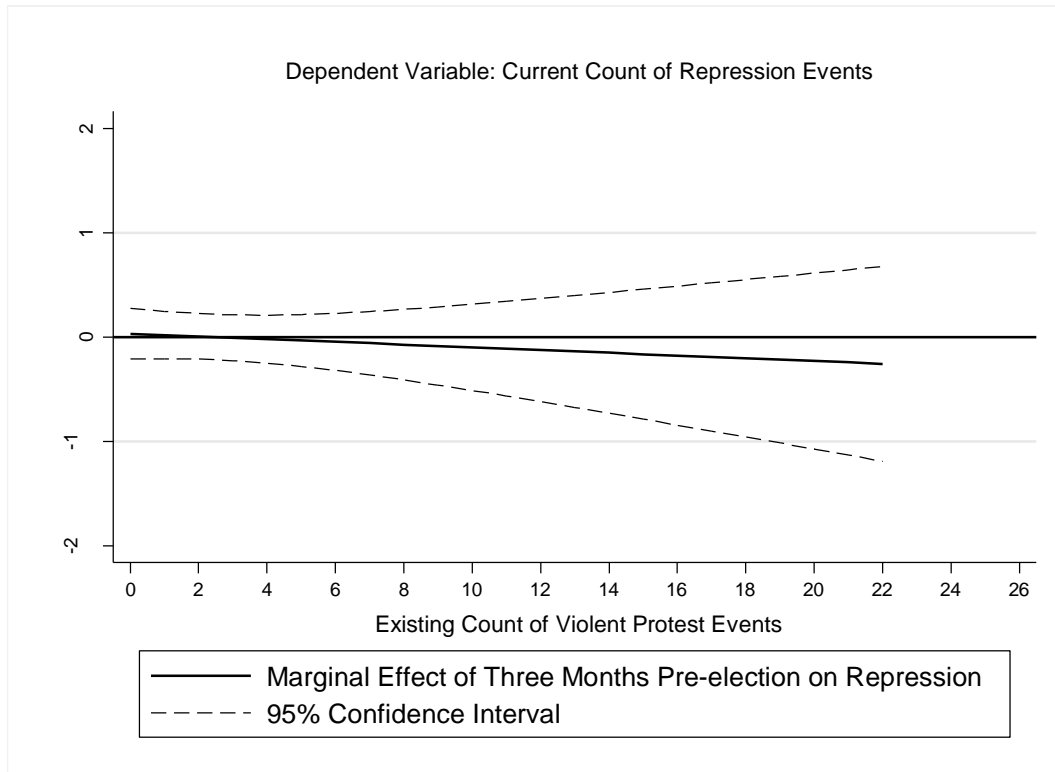
\*\*\* p<0.01, \*\* p<0.05, \* p<0.10

**Table 2: Electoral Repression Targeted at the Opposition versus Citizens**

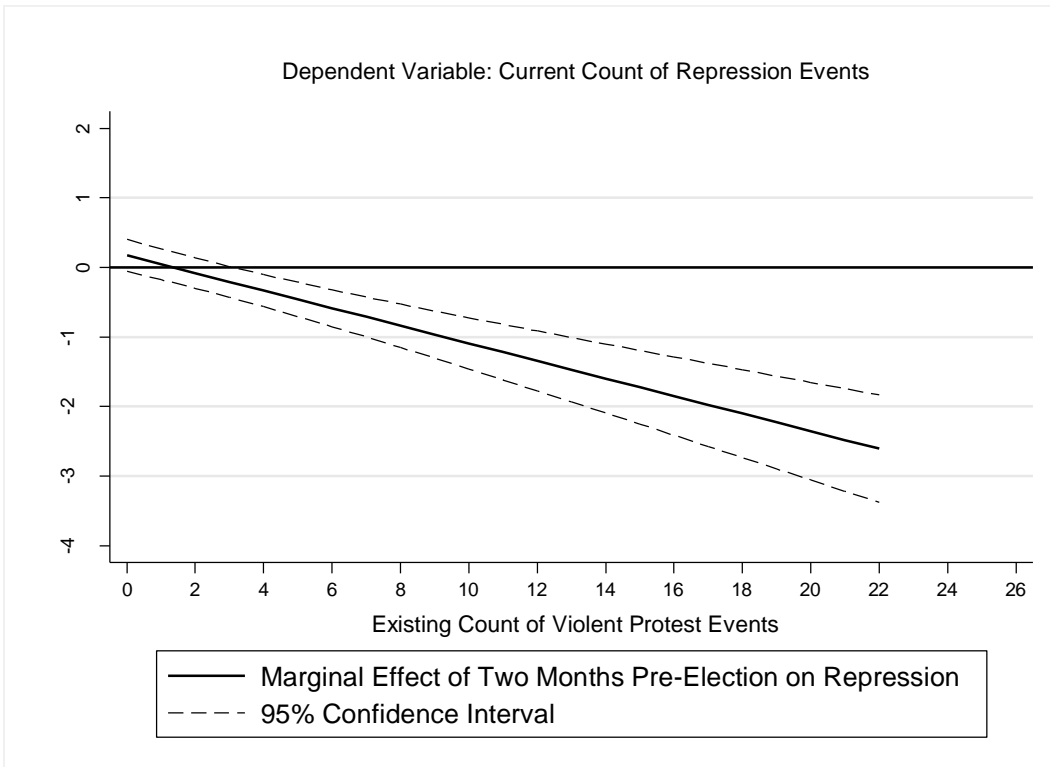
Dependent variable	<i>Opposition repression</i>		<i>Citizen repression</i>	
	Coefficient	IRR	Coefficient	IRR
<i>Lagged dependent variable</i>	0.236 <sup>***</sup> (0.034)	1.266 <sup>***</sup> (0.044)	0.187 <sup>***</sup> (0.028)	1.205 <sup>***</sup> (0.034)
<i>Pre-election month 6</i>	0.227 (0.302)	1.255 (0.380)	0.198 (0.294)	1.220 (0.359)
<i>Pre-election month 5</i>	-0.251 (0.374)	0.778 (0.291)	0.221 (0.282)	1.247 (0.352)
<i>Pre-election month 4</i>	0.565 <sup>**</sup> (0.267)	1.759 <sup>**</sup> (0.469)	-0.384 (0.379)	0.681 (0.259)
<i>Pre-election month 3</i>	0.123 (0.303)	1.131 (0.342)	-0.161 (0.350)	0.851 (0.298)
<i>Pre-election month 2</i>	-0.024 (0.320)	0.976 (0.313)	-0.746 <sup>*</sup> (0.450)	0.474 <sup>*</sup> (0.213)
<i>Pre-election month 1</i>	0.318 (0.288)	1.374 (0.396)	0.078 (0.303)	1.081 (0.328)
<i>Election month</i>	1.198 <sup>***</sup> (0.184)	3.313 <sup>***</sup> (0.608)	0.254 (0.279)	1.289 (0.359)
<i>Post-election month 1</i>	-0.216 (0.352)	0.805 (0.283)	-0.329 (0.416)	0.720 (0.299)
<i>Post-election month 2</i>	-0.435 (0.390)	0.647 (0.252)	-0.148 (0.356)	0.862 (0.307)
<i>Post-election month 3</i>	0.357 <sup>*</sup> (0.287)	1.429 (0.410)	-0.495 (0.488)	0.610 (0.297)
<i>Post-election month 4</i>	-0.923 <sup>*</sup> (0.512)	0.397 <sup>*</sup> (0.203)	-0.321 (0.410)	0.725 (0.297)
<i>Post-election month 5</i>	-0.106 (0.382)	0.899 (0.343)	0.029 (0.351)	1.029 (0.361)
<i>Post-election month 6</i>	-0.063 (0.379)	0.939 (0.356)	0.517 <sup>*</sup> (0.310)	1.676 <sup>*</sup> (0.520)
<i>Between rounds</i>	0.965 <sup>**</sup> (0.491)	2.626 <sup>**</sup> (1.288)	-0.081 (0.765)	0.922 (0.706)
<i>Violent protest</i>	0.066 <sup>***</sup> (0.014)	1.068 <sup>***</sup> (0.015)	0.060 <sup>***</sup> (0.012)	1.062 <sup>***</sup> (0.013)
<i>Non-violent protest</i>	0.139 <sup>***</sup> (0.023)	1.148 <sup>***</sup> (0.027)	0.085 <sup>***</sup> (0.027)	1.088 <sup>***</sup> (0.029)
<i>Consumer Price Index</i>	0.037 (0.026)	1.038 (0.027)	0.104 <sup>***</sup> (0.028)	1.109 <sup>***</sup> (0.031)
<i>Military</i>	0.087 (0.143)	1.091 (0.156)	0.401 <sup>***</sup> (0.152)	1.494 <sup>***</sup> (0.226)
<i>Accommodation (opposition or citizen, respectively)</i>	0.358 <sup>***</sup> (0.084)	1.431 <sup>***</sup> (0.121)	0.073 (0.083)	1.076 (0.090)
Constant	-1.624 <sup>***</sup> (0.141)	0.197 <sup>***</sup> (0.028)	-1.395 <sup>***</sup> (0.153)	0.248 <sup>***</sup> (0.038)
Number of obs.	5761		5761	
Number of countries	42		42	
Wald $\chi^2$ (20)	275.61 <sup>***</sup>		154.66 <sup>***</sup>	

\*\*\* p<0.01, \*\* p<0.05, \* p<0.10

**Figure 1: Marginal Effect of Three Months Pre-election on Repression**



**Figure 2: Marginal Effect of Two Months Pre-election on Repression**



## Appendix I: Repression events used from the IDEA data

Event	Description
Assassination	Murder that is explicitly characterized as political killing and assassination.
Impose restrictions	Declare martial law or curfew, and the imposition of similar political restrictions on civil activities.
Beatings	Beatings (physical assaults without the use of weapons).
Impose censorship	Limit or curb any expression of ideas, including material, objects that are considered obscene, objectionable or harmful.
Crowd control	Mobilization or use of compliance force by police, military and others for crowd control.
Bodily punishment	The infliction of bodily injury, death or pain for the explicit purpose of punishment. Contrast this physical sanction with force used to extract information (torture, code 2225).
Force Use	All uses of physical force not otherwise specified. Includes material property destruction, acts of physical sabotage, and other acts of material damage not otherwise specified.
Torture	Maiming and all other reports explicitly characterized as torture. Contrast this force used to extract information from physical sanctions for punishment (2223).
Armed force mobilization	All armed force mobilizations not otherwise.
Armed force activation	Activation of all or part of previously inactive armed forces.
Armed force occupation	Use of armed forces to take over or occupy the whole or part of a territory.
Covert monitoring	Spying and other covert intelligence gathering operations.
Armed force threats	All threats to use armed force.
Other physical force threats	All threats to use non-armed, physical force.
Physical assault	All uses of non-armed physical force in assaults against people not otherwise specified.
Small arms attack	Shooting of small arms, light weapons and small explosives, including the use of all handguns, light machine guns, rifles and hand grenades.
Political arrests	Arrests and detentions, explicitly characterized as political.
Armed actions	Ambiguous initiation of the use of armed forces to fire upon another armed force, population or territory.
Refuse to allow	Disagree or object, refuse to allow or acknowledge, restrict or suspend liberties.
Seize possession	Take control of positions or possessions.
Threaten forceful attack	Explicit threat to use armed forces in an attack or invasion.
Threaten	All threats, coercive warnings not otherwise specified.
Non-specific threats	Threats without specific negative sanctions, including all intimidation, harassment and stalking.
Give ultimatum	Threats conveyed explicitly as an ultimatum.

## Appendix II: Targets of repression as coded by IDEA

Sectors chosen for inclusion in <i>Opposition repression</i>	Sectors chosen for inclusion in <i>Civilian repression</i>
Candidates	Artists
Civic group agents	Athletes
Political opposition	Bosnian Croats
Political parties	Bosnian Moslems
	Bosnian Serbs
	Businesses
	Christian Orthodox
	Christian
	Detainees
	Diplomats
	Educators
	Ethnic agents
	Farmers
	Hindu
	Jew
	Kurds
	Health care agents
	Migrants
	Moslem
	Philanthropic agents
	Religious agents
	Students
	Unions

### Appendix III: Summary statistics of variables in analysis

Variable	Obs.	Mean	Std. dev.	Minimum	Maximum
<i>Accommodation</i>	10902	0.490	1.434	0	38
<i>Between Rounds</i>	10902	0.003	0.052	0	1
<i>Civilian Accommodation</i>	10902	0.052	0.279	0	6
<i>Civilian Repression</i>	10902	0.111	0.480	0	13
<i>CPI (logged)</i>	5761	2.384	1.805	-7.595	19.210
<i>Election Month*</i>	10902	0.015	0.123	0	1
<i>Military</i>	10902	0.363	0.481	0	1
<i>Non-violent Protest</i>	10902	0.240	0.819	0	15
<i>Opposition Accommodation</i>	10902	0.024	0.183	0	4
<i>Opposition Repression</i>	10902	0.114	0.498	0	8
<i>Violent Protest</i>	10902	0.445	1.404	0	24

\* Same summary statistics for *Pre-election months 1 to 12 and Post-election months 1 to 12*

### Appendix IV: Summary Statistics for Main Individual Repression Events

Variable	Obs	Mean	Std. Dev.	Min	Max
Repression	15498	1.525487	5.422347	0	257
Arrests	15498	0.1140147	0.503683	0	12
Beatings	15498	0.0082591	0.1252069	0	6
Torture	15498	0.0337463	0.2524131	0	6
Assault	15498	0.0726545	0.4150949	0	16
Shooting	15509	0.193565	0.8438476	0	31
Curfew	15498	0.0517486	0.3749339	0	12
Censorship	15498	0.0181959	0.172076	0	7
Suspension of Liberties	15498	0.0677507	0.3598611	0	9

## Appendix V: The Effect of Violent Protest on Repression Mediated by Timing

Dependent variable	Repression	
	Coefficient	IRR
<i>Lagged dependent variable</i>	0.037 <sup>***</sup> (0.002)	1.038 <sup>***</sup> (0.002)
<i>Violent protest</i>	0.110 <sup>***</sup> (0.004)	1.116 <sup>***</sup> (0.005)
<i>Pre-election month 6*Violent protest</i>	0.142 <sup>**</sup> (0.060)	1.153 <sup>**</sup> (0.069)
<i>Pre-election month 5*Violent protest</i>	-0.042 <sup>**</sup> (0.016)	0.959 <sup>**</sup> (0.016)
<i>Pre-election month 4*Violent protest</i>	0.002 (0.039)	1.002 (0.039)
<i>Pre-election month 3*Violent protest</i>	-0.021 (0.024)	0.979 (0.023)
<i>Pre-election month 2*Violent protest</i>	-0.137 <sup>***</sup> (0.019)	0.872 <sup>***</sup> (0.017)
<i>Pre-election month 1*Violent protest</i>	-0.048 <sup>**</sup> (0.021)	0.954 <sup>**</sup> (0.020)
<i>Election month*Violent protest</i>	-0.117 <sup>***</sup> (0.033)	0.890 <sup>***</sup> (0.029)
<i>Post-election month 1*Violent protest</i>	-0.016 (0.048)	0.984 (0.047)
<i>Post-election month 2*Violent protest</i>	-0.069 <sup>***</sup> (0.016)	0.933 <sup>***</sup> (0.015)
<i>Post-election month 3*Violent protest</i>	0.101 <sup>*</sup> (0.058)	1.106 <sup>*</sup> (0.064)
<i>Post-election month 4*Violent protest</i>	0.043 (0.040)	1.044 (0.041)
<i>Post-election month 5*Violent protest</i>	0.050 (0.054)	1.051 (0.057)
<i>Post-election month 6*Violent protest</i>	0.084 (0.059)	1.087 (0.064)
<i>Between rounds*Violent protest</i>	0.042 (0.084)	1.043 (0.088)
<i>Military</i>	0.089 <sup>*</sup> (0.051)	1.093 <sup>*</sup> (0.055)
<i>Accommodation</i>	0.071 <sup>***</sup> (0.005)	1.073 <sup>***</sup> (0.005)
<i>Constant</i>	-0.478 <sup>**</sup> (0.036)	0.620 <sup>***</sup> (0.023)
Number of obs.	10,853	
Number of countries	61	
Wald X <sup>2</sup> (32)	2672.29 <sup>***</sup>	

Coefficients of electoral time dummies not shown (available upon request); \*\*\* p<0.01, \*\* p<0.05, \* p<0.10



## Appendix VI: Countries and Years in the analysis (in alphabetical order)

Algeria*	1990-2008	Senegal*	1990-2000
Angola*	1990-2008	Seychelles*	1990-2008
Azerbaijan*	1991-2008	Sierra Leone	1990-1997
Belarus*	1991-2008	Sudan*	1990-2008
Benin	1990-1991	Taiwan*	1990-2000
Bosnia-Herzegovina	1991-2008	Tajikistan	1991-2008
Burkina Faso*	1991-2008	Tanzania	1990-2008
Burundi*	1990-1993, 1996-2005	Togo*	1990-2008
Cameroon*	1990-2008	Tunisia*	1990-2008
Cape Verde	1990-1991	Turkmenistan	1991-2008
Central African Republic*	1990-1993, 2003-2008	Uganda*	1990-2008
Chad*	1990-2008	Uzbekistan	1991-2008
Comoros		Yemen (Republic of)	1990-2008
Congo (Republic of)*	1990-1992, 1997-2008	Zambia	1990-2008
Democratic Republic of Congo*	1990-2008	Zimbabwe*	1990-2008
Djibouti	1990-2008		
Ecuador*	2000-2002		
Egypt*	1990-2008		
Equatorial Guinea	1990-2008		
Gabon*	1990-2008		
Gambia	1990-2008		
Georgia*	1991-2003		
Ghana*	1990-1992		
Guinea	1990-2008		
Guinea-Bissau*	1990-1999		
Haiti*	1990-2008		
Iran*	1990-2008		
Ivory Coast*	1990-2008		
Kazakhstan*	1990-2008		
Kenya*	1990-2002		
Kyrgyzstan*	1990-2005		
Liberia	1990-2005		
Madagascar*	1990-1993		
Malawi*	1990-1994		
Maldives	1990-2008		
Mali	1990-1992		
Mauritania*	1990-2008		
Mexico*	1990-2000		
Moldova	1991-1996		
Mozambique*	1990-2008		
Namibia*	1990-2008		
Niger*	1990-1993, 1996-1999		
Nigeria*	1990-2008		
Peru*	1990-2000		
Russia*	1991-2008		
Rwanda*	1990-2008		

\* included in models with *CPI*