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**Taming the Tiger: Peaceful and Violent Protest and the Repressive  
Responses of Government**

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**TAMING THE TIGER:**

**PEACEFUL AND VIOLENT PROTEST AND THE REPRESSIVE RESPONSES OF  
GOVERNMENT<sup>1</sup>**

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## Abstract

Herein, we examine the kinds of protest that leaders see as threatening to their ability to retain political power. Then, we focus on how leaders respond to such protests. By differentiating among types of protests and types of leadership response, we provide new insights into the civil conflict/ repression relationship. In so doing, we also answer question 2—how leaders respond to various types of civil conflict. We were particularly interested in seeing if they respond to peaceful demonstrations with political repression and violent civil conflict with violent repression.

We find that leaders are more likely to use violent repression against their citizens in response to both peaceful and violent protests. Specifically, leaders respond to general strikes (those with at least 1,000 people participating against government policy), and anti-government demonstrations (our metrics of peaceful protest) by ratcheting up their use of torture, political imprisonment, and extra-judicial killing in comparison to when there is no peaceful protest. We also find that leaders respond to the incidence of civil war, and the onset of civil war (our metrics of violent protest) by increasing their use of forced disappearances, torture, political imprisonment, and extra-judicial killing in comparison to when there is no violent protest. In this regard, our findings are consistent with leading scholars such as Davenport (2007).

However, we also find that sometimes leaders may also use less political repression (indicated through our index of civil and political rights) in response to certain types of peaceful protests. Some leaders may view the best way to defuse these protests with concessions. In response to general strikes, some leaders may loosen their restrictions on domestic movement, while others may improve the rights of their workers in response to anti-government demonstrations.

We believe that leaders may act to loosen these restrictions or improve workers' rights, because it is in their strategic interest. Our findings are consistent with Cederman et al. (2013), who argue that protests are signalling devices, which that tell leaders about the strength of opposition to their policies. If protests citizens take to the streets in protest because they are aggrieved, leaders will likely view these behaviours as threatening. In contrast to a simple threat, the repression- nexus argument (Poe 2004), which posits that rulers will respond with more repression when threatened, we argue that leaders can undertake a variety of strategic policy responses that they think will enable them to retain political power. Sometimes these choices are repressive, but in other cases they may be more conciliatory. These leaders may believe that, by meeting some of the concerns of protestors, they can destabilize the opposition or peel off those less committed to the cause. Finally, we conclude that in some cases leaders respond to peaceful or violent protest with a mix of tactics: ratcheting up their use of violent repression while simultaneously reducing repression of civil and political rights. In this case, leaders respond with a mixed strategy when faced by general strikes and the incidence or onset of civil war.

## 1. Introduction

Clyde Beatty, one of America's most famous lion tamers performing in the early 20th century, had a distinct approach to keeping lions and tigers at bay during performances. He arrived with a whip, gun, and chair to demonstrate his dominion over the animals. He used the whip to threaten the animals into compliance. He used the gun if he was unable to control the animals and had to resort to lethal force to save himself. Finally, he used the chair as an alternate avenue to confuse the animals and defuse the potential of deadly attack (Beatty and Wilson: 1946). Beatty believed that a varied response was the best way to deflect threats and preserve control of the situation within the ring (Beatty and Wilson: 1946). While we acknowledge that the task of taming lions and tigers is different from ameliorating or quelling protest, we believe this analogy may help scholars better understand how leaders respond to different types of protests.

Leaders do not always abide by the laws of the jungle, which require that leaders act with ruthless and consistent intensity—kill or be killed. Herein, we examine the kinds of protest that leaders see as threatening to their ability to retain political power. Then, we focus on how leaders respond to such protests. By differentiating among types of protests and types of leadership response, we provide new insights into the civil conflict/repression relationship.

We find that leaders are more likely to use violent repression against their citizens in response to both peaceful and violent protests. Specifically, leaders respond to general strikes (those with at least 1,000 people participating against government policy) and anti-government demonstrations (our metrics of peaceful protest) by ratcheting up their use of torture, political imprisonment, and extrajudicial killing in comparison to when there is no peaceful protest. We also find that leaders respond to the incidence of civil war and the onset of civil war (our metrics of violent protest) by increasing their use of forced disappearances, torture, political imprisonment, and extrajudicial killing in comparison to when there is no violent protest. In this regard, our findings are consistent with leading scholars such as Davenport (2007).

However, we also find that sometimes leaders may also use less political repression (indicated through our index of civil and political rights) in response to certain types of peaceful protests. Some leaders may view the best way to defuse these protests with concessions. In response to general strikes, some leaders may loosen their restrictions on domestic movement, while others may improve the rights of their workers in response to anti-government demonstrations. We believe that leaders may act to loosen these restrictions or improve workers' rights, because it is in their strategic interest. Our findings are consistent with Cederman et al. (2013), who argue that protests are signaling devices that tell leaders about the strength of opposition to their policies. If citizens take to the streets in protest because they are aggrieved, leaders will likely view these behaviors as threatening. In contrast to a simple threat, the repression-nexus argument (Poe 2004), which posits that rulers will respond with more repression when threatened, we argue that leaders can undertake a variety of strategic policy responses that they think will enable them to retain political power. Sometimes these choices are repressive, but in other cases they may be more conciliatory. These leaders may believe that, by meeting some of the concerns of protestors, they can destabilize the opposition or peel off those less committed to the cause. Finally, we conclude that in some cases leaders respond to peaceful or violent protest with a mix of tactics: ratcheting up their use of violent repression while simultaneously reducing repression of civil and political rights. In this case, leaders respond with a mixed strategy when faced by general strikes and the incidence or onset of civil war.

To better understand how leaders respond to various types of protest, we undertook an analysis of 194 independent nation states, with a total population of at least 500,000, from 1981 to 2011, using the Correlates of War (2011) framework. Furthermore, we relied on the Banks and Wilson (2015), Themnér and Wallensteen (2014), and Gleditsch et al. (2002) datasets to provide metrics of various types of protest and use the Cingranelli and Richards (2014) (CIRI) human rights database to provide metrics of various types of repression including leaders' violations of physical integrity, civil, and political rights. To our knowledge, the use of these different datasets enables the most comprehensive examination of this topic to date.

The article proceeds as follows. We begin with a review of the extant literature on leaders' responses to various types of protest. Then, we put forward our theoretical arguments and hypotheses. In section four, we present our research design and, in section five, our results. Finally, we delineate our conclusions and indicate how our work illuminates research streams across a number of issue areas. We end with some suggested avenues for future research.

## 2. Literature Review

We build on the literature where academics have focused their attention on how leaders *respond* to protest (Gurr: 1970; Moore: 2000; Mason: 2004; Davenport and Armstrong: 2004; Poe: 2004; Davenport: 2007; Carey: 2010; Pierskalla: 2010; Conrad: 2011; Cederman et al.: 2013; Ritter and Conrad: 2016). Davenport (2007, 7-8) reviewed much of the literature and found leaders always respond with repression to threats to their ability to retain office. He asserted the response is so common, it is almost a law—the “Law of Coercive Responsiveness.” He also noted that we know remarkably little about what types of protests leaders view as threats to their hold on power. In her work, Carey (2010) furthered our knowledge by unpacking the effects of different types of domestic conflict on state repression. In her research, Carey focused on whether domestic conflict led to the most severe levels of human rights violations. Pierskalla (2010, 2013) used a game theoretic approach and found that leaders could respond with repression or accommodation to domestic threats, which he describes as offering and implementing a credible policy compromise. In other research that examined strategies of accommodation and repression during periods of domestic political conflict, Moore (2000: 120) found that leaders will stop using accommodative strategies and become more violent if their accommodative tactics are met with protest by opposition groups. While Mason (2004) argued that the limited capacity or flexibility of post-colonial states means they are more likely than industrialized countries to respond with violence to peaceful opposition, because these governments often lack the ability to respond in more subtle ways to anti-government protests. More recent research examined the concessionary strategies of authoritarian regimes (Conrad: 2011). Meanwhile, still other scholars (Ritter and Conrad: 2016) argued that leaders are forward-looking and will attempt to forestall future protest by adopting repressive tactics. In so doing, they can restrict the ability of opposition groups to engage in protest. They also found that opposition groups may self-censor when they expect a repressive response. Finally, researchers have indicated that when leaders are likely to view protest as threatening often varies across regime types (Davenport and Armstrong: 2004). In particular, leaders of democratic states (compared to their authoritarian counterparts) will tend to view a much narrower range of protests as threatening to the stability of the regime. But, sometimes scholars find it difficult to characterize the severity of threats a leader faces. For example, does widespread peaceful protest pose a greater threat to a leader than more limited, but violent, anti-government protest? Some leaders may view the same situation as being more or less threatening in comparison to their counterparts. (Davenport: 1995; Poe: 2004; Carey: 2010; Ritter and Conrad: 2016).

While there are a number of informative strands that exist in the threat repression literature, scholars have not come to a consensus regarding how and when leaders respond to protest. Moreover, researchers have not yet unpacked the effects of different types of protest on the range of various forms of repression or looked closely at the possibility that governments respond with both repression and accommodation to different types of protest. In addition, academics have not fully incorporated some of the insights from those who focus on grievances. Lastly, we believe a grievance-based approach can help scholars better understand why some leaders may find both peaceful and violent anti-government behavior threatening (Gurr: 1970; Cederman et al.: 2013). We examine these issues in more detail in the next section.

### **3. Theoretical Framework**

Our theoretical approach incorporates three different aspects of the literature into a unified whole. First, we build on Sabine Carey's (2010) research and examine a much broader range of government responses. We examine all levels of government repression not just the most severe. We also investigate a broader range of repression types, including not only repression of physical integrity rights but also the curtailment of civil and political rights. Our approach also distinguishes between peaceful and violent protest directed specifically toward leaders. We unpack how leaders respond to non-violent general strikes, anti-government demonstrations, and the incidence and onset of civil wars. Second, we build on previous research about the importance of grievances as a motivation for groups protesting against the state (Cederman et al.: 2013; Regan and Norton: 2005; Regan: 2016). People who are willing to engage in peaceful and violent protest know the risks, yet they are still willing to try and change their leaders (Regan and Norton: 2005; Regan: 2016). Thus, it is not surprising that leaders find protests so threatening. Third, building upon Pierskalla (2010), we show that leaders may respond differently to peaceful and violent protest. Some leaders will not only respond to violent protest with violent repression but will mix repression and accommodation.

If leaders are threatened by peaceful or violent protest as indicated in previous research (Cederman et al.: 2013; Regan and Norton: 2005; Regan: 2016), then we would expect these leaders to respond with more violent repression regardless of the type of protest they face in an effort to ratchet up the costs of protest and maintain their hold on political power. For example, in March 2011, anti-government demonstrations erupted in the southern Syrian city of Deraa. There, peaceful demonstrators demanded that President Bashar al-Assad democratize the Syrian political system. The government responded to these peaceful demonstrations with deadly force (BBC: 2016). The BBC (2016) noted that "as the unrest spread, the crackdown intensified. Opposition supporters began to take up arms, first to defend themselves and later to expel security forces from their local areas." Instead of suppressing dissent, the intensified use of political and violent repression by the al-Assad regime led to a rapid escalation of violence across the country, and Syria descended into civil war, with the formation of "hundreds of rebel brigades to battle government forces for control of the country" (BBC: 2016). The conflict in Syria provides anecdotal evidence that al-Assad's regime viewed peaceful and then more violent protest as threatening to the stability of the regime. The al-Assad government responded to both peaceful and violent protest with extrajudicial killing, torture, political imprisonment, and forced disappearances of its citizens (U.S. Department of State: 2012). This discussion leads to our first two hypotheses:

H1) When citizens protest more violently, leaders will respond with a more frequent use of violent repressive tactics.

H2) When citizens employ more peaceful dissent, leaders will respond with a more frequent use of violent repressive tactics.

We also believe there are several good reasons why some leaders may also respond positively in the arena of civil and political rights to both peaceful and violent anti-government protest. As one example, leaders act as principals in a principal-agent relationship with their police and military (Mitchell: 2004). It may be that leaders have limited ability to control their police and military and prevent them using violent repression in response to protests. Therefore, even if they wanted to instruct their agents to stop killing, torturing, imprisoning, and disappearing members of the opposition, they may only have a limited capacity to do so. Leaders may turn to symbolic or substantive actions to reduce protest that rely less upon compelling their agents to change their behavior.

One example of our third hypothesis that rulers improve the civil and political rights of their citizens in response to violence is the behavior of the Turkish government in the late 2000s. It eased restrictions on the Kurdish language after decades of suppression. The government gave it status of a ‘free language’ despite the ongoing violent clashes between the state and the rebel fighters of Kurdistan Workers Party (Cemiloglu 2009; Economist 2011). The violence may have prompted the government to change its policy to ameliorate some of the demands of its Kurdish population.

Turning to our fourth hypothesis that leaders respond to non-violent protest by improving their citizens civil and political rights, it may be easier for leaders to respond in a conciliatory way when faced with non-violent protest (Chenoweth and Stephan: 2011). For example, as documented by Lawrence (2010), unions demanded a general strike in Morocco on December 14, 1990 to double the monthly minimum wage from \$130 to \$260 per month. In the week prior to the strike, then Prime Minister Laraki announced an unspecified increase in the minimum wage and an extension of workers’ benefits. The unions saw these offers as inadequate and they continued with their strike. It led to between 40 and 80 percent of the working population not showing up for work (unions and the government disputed the turnout for the strike) (Lawrence: 2010). As a result of the strike the government announced a 15-percent increase in wages for all workers, an increase in the minimum wage, and new benefits. It also followed up with a body to investigate and try to resolve the issue of youth unemployment (Lawrence: 2010). This discussion leads to our second set of hypotheses:

H3) When citizens turn to violent protest, leaders better respect citizens’ political and civil rights.

H4) When citizens engage in peaceful dissent, leaders better respect citizens’ political and civil rights.

Finally, leaders who are particularly strategic in their response to domestic protest may consider a multi-pronged response: the whip, gun, and chair as delineated in our Beatty analogy. They may use a combination of more frequent violent repressive tactics raising the costs for some opposition members whilst easing restrictions on civil and political rights in an effort to satiate some of the opposition’s demands. For instance, the actions of the third president of Togo, Gnassingbe Eyadema, during 1991 provide an interesting illustration of our fifth and sixth hypotheses. Having ruled Togo for more than 24 years, President Eyadema faced widespread demands for political reform and a transition to a multiparty democracy (U.S. Department of State: 1992). Citizens voiced their discontent through peaceful general strikes and anti-government demonstrations as well with violent attacks on the “police, facilities and vehicles, individual policemen and soldiers, and the general destruction of property” (U.S. Department of State: 1992). President Eyadema’s regime responded with both significant human rights

violations to both peaceful and violent anti-government protests. The National Human Rights Commission estimated that 100 people had been extrajudicially killed by the security services in response to these protests, with more than 1,000 also injured (U.S. Department of State: 1992). The president also responded to these protests with concessions. In April 1991, he promulgated a political party charter allowing other groups to form political parties, which led to the registration of 22 political parties and a general amnesty for those committing violence against the state (U.S. Department of State: 1992). President Eyadema convened a national conference in June 1991 to facilitate the transition to a multiparty democracy. His approach appeared successful helping him to subsequently retain political power by winning multiparty presidential elections in 1993, 1998, and 2003 (notwithstanding claims of vote rigging by opposition groups) until his death at the age of 69 in 2005. At that point, he had been the longest serving head of state in Africa. This discussion leads to our fifth and sixth hypothesis.

H5) When citizens engage in violent protest, leaders respond with a mixed strategy. Leaders more frequently use using violent repressive tactics whilst simultaneously improving their respect for political and civil rights.

H6) When citizens engage in peaceful dissent, leaders respond with a mixed strategy. Leaders rely more frequently on violent repressive tactics whilst also simultaneously improving their respect for political and civil rights.

#### 4. Research Design

In this study, we relied on a cross-national, annual, time-series dataset based on the Correlates of War (2011) framework. We looked at all countries, with a population of at least 500,000 in 1981, and covered the period between 1981 and 2011. In addition, we followed the advice of De-Boeuf and Keele (2008) in constructing our models. According to these two scholars, to understand the dynamic relationship between changes in independent variables of interest and how this relationship can affect dependent variables of interest, researchers should use an error-correction model design. The error-correction model is appropriate in cases where regressors are weakly exogenous (De-Boeuf and Keele: 2008, 16). For example, in our analysis, it is possible that people protest, because they fear their government will worsen its human rights record in the future. In these cases, we would have a problem of reverse causality. However, the approach recommended by De-Boeuf and Keele (2008), which uses both changed and lagged regressors on a changing dependent variable, minimizes the effect of any reverse causality that may exist. Moreover, while some debate exists in the methods literature (see Esarey: 2016; Grant and Lebo: 2016; Keele, Linn, and Webb: 2016, 2016a) about the value of the error-correction approach, we agree with Keele, Linn, and Webb (2016a) about its usefulness to better understanding dynamic relationships. Thus, our models take the following functional form:

$$\Delta Y_t, \alpha_1^* Y_{t-1} + \beta_0^* \Delta X_t + \beta_1^* X_{t-1} + \varepsilon_t$$

First,  $\Delta Y_t$  is the change in the dependent variable and represents the annual change in different types of violent and political repression employed by a government. Our two measures of violent and political repression (our dependent variables) come from Cingranelli and Richards (2014) and are described below. Second,  $\alpha_1^* Y_{t-1}$  represents our dependent variable lagged one year. Third,  $\beta_0^* \Delta X_t + \beta_1^* X_{t-1}$  represents (1) our independent variables—peaceful and violent anti-government protest—in both their change and lagged formats and (2) our control variables in both their change and lagged formats—prior violent repression, restrictions on freedoms of assembly and association, the number of groups excluded from



political power, level of executive constraints, degree of de facto judicial independence, number of intergovernmental organizations (IGOs) joined, the log of GDP per capita in U.S. dollars, the extent of trade as a proportion of GDP, total natural-resource rents, and the log of population).<sup>2</sup> For our independent variables, we used two measures of peaceful anti-government protest: general strikes and anti-government demonstrations, which both come from the Banks and Wilson (2015) dataset and are described below. Similarly, we also employed two measures of citizens' violent anti-government behavior: civil-war onset and civil-war incidence, which both come from the Themnér and Wallensteen (2014) and Gleditsch et al. (2002) datasets. We excluded the measure of riots, coups, and assassinations from the analysis (Banks and Wilson: 2015), since it was not explicitly coded to show that such actions were truly aimed at the government. Fourth,  $\epsilon_t$  is the zero-mean error term. Lastly, we applied an ordinary least squares model with the functional form to our independent variables. Moreover, we limited the effects of heteroskedasticity and autocorrelation by clustering our analysis by country and using robust standard errors.

Before presenting the results of our analysis, we elaborate on the operationalization procedures used for the key independent and dependent variables to ensure replication.

#### **a. Dependent Variables**

As previously mentioned, we adopted measurements of the human-rights practices of governments as the key dependent variables. In particular, we had two dependent variables. They are: (1) the annual change in violent repression used by the government and (2) the annual change in political repression used by the government. In addition, we depended upon metrics that reflect annual changes in these human-rights metrics rather than metrics that delineate levels of repressive behavior to better describe changes in government behavior and obtained these statistics from the Cingranelli-Richards (CIRI: 2014) human-rights dataset. We chose the Cingranelli-Richards (CIRI) Human Rights Database over the Political Terror Scale, because it is broader. It provides users not only with data on a wide range of human rights practices but also directly measures government policy choices across different types of human rights issues. The CIRI database constructs their scales by coding Amnesty International, U.K., and U.S. Department of State Human Rights Reports. Moreover, previous research has indicated that there is no systematic bias in data sourced from the U.S. State Department and Amnesty International annual human rights reports (Poe et al.: 2001).

Our decision to use human-rights datasets also required us to control for certain limitations of the metrics. In this sense, many researchers have acknowledged that it is difficult to measure government violations of human rights (e.g. Goldstein: 1992; Lopez and Stohl: 1992; Poe et al.: 1999; Landman and Carvalho: 2009). The paucity of fine-grained, human-rights data that systematically covers different types of human-rights violations over time has two consequences for our research question. Firstly, because of the ordinal nature of the data, it is not easy to test these changes in government behavior. Our findings will be significant only if there have been large enough changes in behavior to reflect changes in these human-rights metrics. Secondly, the tripartite nature of our human-rights data means categorization as a frequent abuser of rights begins with 50 cases and has no upper limit. For example, a government whose record on forced disappearances worsens from 50 to 100 cases would be given the same value as a government that did not increase its reliance of forced disappearance beyond 50 cases in that same time period. With that being said, we believe that the CIRI database remains the most comprehensive and nuanced dataset and is the only source of information that permits an analysis across different types of violations. Another limitation is that our measure depends upon annual data rather than real-time, daily

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<sup>2</sup> With the exception of prior violent repression.

data. Therefore, our analysis could potentially pick up unrelated events where the number of anti-government demonstrations and the use of violent repression have increased but the cause is something other than the extent of political exclusion faced by specific groups. Although we minimized these possibilities by controlling for alternate explanations, we still acknowledge that our sample undoubtedly contains such interference, which could weaken our findings (rather than artificially strengthen them).

### *1. Annual Change in Government Use of Violent Repression*

We used the annual change in the CIRI physical integrity rights index, which we label ‘violent repression,’ and is also a Mokken scale of four factors of freedom—extrajudicial killing, forced disappearances, torture, and political imprisonment. We used this dataset to illuminate violent repression, because when governments politically imprison, disappear, torture, or kill citizens, they are using violent repressive tactics. For ease of discussion, we inverted the components of the CIRI physical integrity rights index, which is originally a nine-point scale. The inverted scale ranges from 0 (no violations of physical integrity rights) to 8 (frequent violations of all those rights). Moreover, for this measure of violent repression, we coded the four physical integrity variables on a three-part scale (0-2) as follows: 0=no annual violations, 1=some violations (1–49), and 2=frequent annual violations (50 or more). According to this model, annual increases in violent repression represent more frequent violations of physical integrity rights in comparison to the previous year, and annual decreases in violent repression represent fewer violations of physical integrity rights in comparison to the previous year.

### *2. Annual Change in Government Use of Political Repression*

We used the CIRI civil liberties index (sometimes referred to as the empowerment index) as our measure of political repression.<sup>3</sup> For ease of discussion we also inverted the CIRI civil liberties index, which is a twelve-point scale. The inverted scale ranges from 0, which indicates no recorded instances of civil and political rights repression, to 12, which indicates severe and widespread civil and political rights repression. As before, each component is on a 0-2 scale. The language in the CIRI human rights codebook describing these rights is slightly different to the physical integrity rights components. We coded violations of each of the civil and political rights components on a three-part scale, ranging from 0=absent, 1=moderate, 2=severe and widespread. In particular, a ‘0’ means that these rights are fully protected, a ‘1’ indicates that they are somewhat restricted, and a ‘2’ means that there are widespread and severe restrictions. Furthermore, we applied this scale to six components of political and civil rights. They are: freedom of foreign movement and travel, freedom of domestic movement, freedom of speech and press, freedom of religion, electoral self-determination, and labor rights. According to this model, annual increases in political repression represent more widespread and increasingly severe restrictions of civil and political rights in comparison to the previous year. Annual decreases in political repression represent less widespread and less severe restrictions of civil and political rights in comparison to the previous year.

## **b. Independent variables**

### *1. Strikes, Demonstrations, Civil-war Incidence, and Civil-War Onset*

Following the recommendation of De-Boeuf and Keele (2008) to enable the error-correction model specification, we had two variants for all our independent variables: the annual change and the lag of each

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<sup>3</sup> With the exception of freedom of assembly and association, which we note below.

variable. We also identified the lag of one year with the AIC criterion.

We took our first two independent variables from Banks and Wilson (2015). Our first independent variable (general strikes) represents a country's annual number of general strikes that involve at least 1,000 industrial or service workers from more than one employer and that targets at national-government policies or authority. Our second independent variable (anti-government demonstrations) represents a country's annual number of any peaceful public gathering of at least 100 people for the primary purpose of voicing their opposition to government policies or authority, but excluding demonstrations of a distinctly anti-foreign nature. Our third independent variable is the incidence of civil war with at least 25 annual conflict-related deaths. Our fourth measure is the onset of civil war with at least 25 annual conflict-related deaths. We used Themnér and Wallensteen's (2014) one-year absence of violence as the threshold for the onset of a new civil war if violence returned. Moreover, we characterized additional episodes and higher likelihoods of citizen protests as more intense civil conflict and fewer episodes and lower likelihoods of citizen protests as less intense.

In general, pairwise correlations amongst our independent variables indicate no problems of multicollinearity; the highest is .68 between our restrictions on assembly and association and our executive constraints metrics. We also ran VIF tests amongst the independent variables. These results also indicate no problems of multicollinearity with the executive constraints metric recording the highest value of 2.98 (see Baum 2006).

### **c. Control variables**

To assess the extent to which governments use violent and political repression in response to peaceful and violent protest, we controlled for a number of existing explanations of human-rights abuse. Hence, we built upon Ritter and Conrad's (2016) about the importance of identifying leaders' policy choices to forestall protest by making it difficult for new groups to form. But, many previous scholars have found it difficult to gather cross-national time-series data on these policy choices. One way that governments can prevent opposition groups from protesting is by restricting citizens' freedom of assembly and association. Thus, in our analysis, we used the CIRI (2014) measure of restrictions on freedom of assembly and association.

As with our independent variables, we followed the recommendation of De-Boeuf and Keele (2008) to enable the error correction model specification and had two variants—the annual change and the lag of each control variable—and we identified the lag of one year using the AIC criterion.

Conrad and Ritter (2016) highlight how the prospect of repression will make some people less likely to engage in protest. To capture this possibility, we relied on the lagged measure of violent repression described above. If Conrad and Ritter (2016) are correct and repression that took place in the previous year provides a strong signal to those considering protest about a governments' willingness to use violence, then this should reduce the likelihood of protest. It should also reduce the need for governments to use repression in the future. In contrast if the dynamic relationship between repression and protest reflects a grievance set of explanations, then past repression may enrage opposition groups and prod leaders to use more violent repression.

Other studies (e.g. Mitchell and McCormick: 1988; Henderson: 1991; Davenport: 1995-1996, and 1999; Poe et al. 1999; Apodaca: 2001; Richards et al.: 2001; Poe: 2004; Blanton and Blanton: 2007; Abouharb

and Cingranelli: 2007-2009) have found that wealthier countries, those with growing economies, more democratic countries, and countries which trade more tend to respect physical integrity rights more. Moreover, countries with relatively large populations, as well as those who are resource-rich, tend to respect those same rights less (Poe et al.: 1999; DeMeritt and Young: 2013). Recent evidence indicates that greater levels of de-facto judicial independence improve government records on physical integrity rights (Camp Keith: 2011; Abouharb, Moyer, and Schmidt: 2013). Lastly, there is reason to believe that membership in international governmental organizations should moderate governments' human-rights violations (Landman: 2005). Thus, we control for each of these factors in our analysis.

## 5. Results

Table 1 provides a summary of the operationalization of variables used in analysis. Appendices A and B present our descriptive statistics and the pairwise correlations amongst our variables, respectively. Unless otherwise noted, our threshold of significance is .05 based upon two-tailed tests.

In Table 2, we present the results of our tests of Hypotheses 1 and 2, which posit that as citizens turn to violent protest, leaders will use violent repressive tactics more frequently (Hypothesis 1) and that when citizens engage in peaceful dissent, leaders use of violent repressive tactics more often (Hypothesis 2). We find strong support for both hypotheses using our metrics of dissent and violent repressive tactics. In Table 2, our results indicate that leaders employ violent repressive tactics more often in response to more frequent peaceful protest, which we measured using the annual change in the numbers of anti-government demonstrations and general strikes. The results also prove that leaders use violent repressive tactics more frequently in response to increases in the incidence and onset of new civil wars. The effect of a single additional anti-government protest increases by about .13 of a unit the frequency of violent repressive tactics in the next year on its 0-8 scale (we use the same 0-8 scale for all the substantive predictions for Table 2 discussed below). While the effects of a single extra general strike increase by about .03 of a unit, the frequency of violent repressive tactics in the next year. In addition, the long-term multipliers indicate the total cumulative effect of a unit increase in anti-government demonstrations and general strikes on the total change in frequency of violent repressive tactics. In this case, the total effect of a single extra general strike is about .46 of a unit increase on the total change in frequency of violent repressive tactics. The total effect of a single extra anti-government demonstration is an increase in the total frequency of violent repressive tactics by about .24 of a unit. Moreover, a change in the incidence of civil war increases the frequency of violent repressive tactics in the next year by over a unit at 1.13 on the 0-8 scale of our metric of violent repression, while the onset of a new civil war increases the frequency of violent repressive tactics in the next year by just under a unit at .864. Finally, the total effect of a change in the incidence of civil war on the total change in frequency of violent repressive is to increase it by about 2.56 units on our 0-8 scale of violent repression. The total effect of a change in the onset of civil war on the total change in frequency of violent repressive tactics is to increase it by about 3.16 units on our 0-8 scale of violent repression.

In Appendices F-I, we unpack our metric of violent repressive tactics into its component and examine in more detail the relationships that were significant in Table 2. In particular, we assess as citizens turn to general strikes, anti-government demonstrations, the incidence of civil war, or the onset of a new civil war, if leaders respond by more frequently relying on violent repressive tactics such as disappearances, torture, political imprisonment, and extrajudicial killings. Our findings make for a grim reading. In general, we find that, when citizens turn to peaceful dissent whether it is general strikes or anti-government demonstrations, leaders respond with more frequent use of torture, political

imprisonment, and extrajudicial killing.

In Appendix F, we find that the effects of a single extra general strike increase the frequency of torture by about .05 of a unit, and increases the frequency of both political imprisonment and extrajudicial killing by .04 unit in the next year. In this case, the total effect of a single extra general strike is about .14 of a unit increase on the total change in frequency of our metric of torture, .16 of a unit increase in our metric of political imprisonment, and .13 of a unit increase in our metric of extrajudicial killing.

In Appendix G, we conclude that the effects of a single extra anti-government demonstration increase both the frequency of our metric of political imprisonment by .01 of a unit in the next year and the frequency of our metric of extrajudicial killing by .02 unit in the next year. The total cumulative effect of a single extra anti-government demonstration is to increase by .06 of a unit our metric of political imprisonment and to increase by .08 of a unit our metric of extra judicial killing.

In Appendix H, we establish that when citizens engage in civil war against the state, the effects of a single instance of rebellion increases the frequency of our metric of disappearances by .3 of a unit in the next year, increases the frequency of our metric of torture by .1 of a unit in the next year, increases the frequency of political imprisonment by .2 of a unit in the following year, and increases the frequency of extrajudicial killing by .4 unit in the next year. The total cumulative effect of an occurrence of civil war increases by .9 of a unit our metric of disappearances, .3 of a unit of our metric of torture, .5 of a unit of our metric of political imprisonment, and .8 of a unit our metric of extrajudicial killing. While the total cumulative changes reflect an average across all our cases, they also provide evidence that governments respond to the occurrence of civil war by increasing the violations of these rights by about 1 unit of our metric. Substantively, this means governments move from either not violating these rights to an occasional violation (1-49 violations per year) or from an occasional use to a frequent use (50+ violations per year).

In Appendix I, we show that when citizens begin a new civil war against the state, the effects of this new conflict increase the frequency of our metric of disappearances by .2 of a unit in the next year, the frequency of our metric of torture by .1 of a unit in the next year, the frequency of political imprisonment by .2 of a unit in the following year, and the frequency of extrajudicial killing by .3 unit in the next year. The total cumulative effect of the onset of a new civil war increases by 1.06 of a unit our metric of disappearances, .3 of a unit of our metric of torture, .5 of a unit of our metric of political imprisonment, and .9 of a unit our metric of extrajudicial killing. Once again, these total cumulative changes concerning government use of disappearances and extrajudicial killing indicate that that leaders respond to the onset of a new civil war by increasing the violations of these rights by about 1 unit of our metric. As noted above, this finding reveals that leaders move from either not violating these rights to occasionally violating these rights (1-49 violations per year) or from the occasional use to a more frequent use (50+ violations per year).

In Table 3, we present the results of our tests of Hypotheses 3 and 4, which posit that leaders respond to more violent protest by improving respect for civil and political rights (Hypothesis 3) and leaders respond to more peaceful protest by improving respect for civil and political rights (Hypothesis 4). Overall, we find some support for Hypothesis 4 but no support for Hypothesis 3. More specifically, the results indicate that leaders respond by improving their respect for civil and political rights in response to more peaceful protest, including more anti-government demonstrations. Leaders respond to each anti-government demonstration by reducing the extent of political repression in the following year by

about .04 of a unit on our 0-12 scale. The total effect of a single extra anti-government demonstration on the total change in extent of political repression is to decrease it by about -.19 of a unit on our 0-12 scale of political repression. In contrast, we find that leaders do not respond by improving their respect for civil and political rights when met with more frequent violent anti-government protest.

In Appendices J-K, we unpack our metric of politically repressive tactics into its components and examine in more detail the relationships that were significant in Table 3. In particular, we focus on the relationship between general strikes and anti-government demonstrations and whether or not leaders respond by improving their respect for foreign movement, domestic movement, freedom of speech and press, free and fair elections, religious freedom, and workers' rights.

In Appendix J, we illustrate that leaders respond to each additional general strike in the previous year by improving their respect on our metric of domestic movement by .03 of a unit in the subsequent year. The total cumulative effect of each additional general strike means that leaders respond by improving their respect by .14 of a unit our metric of freedom of domestic movement.

In Appendix K, we see that leaders respond to each additional anti-government demonstration by improving their respect on our metric of workers' rights by .01 of a unit in the subsequent year. Here, the total cumulative effect of each additional anti-government demonstration results in leaders improving their respect by .01 of a unit our metric on workers' rights.

In Table 4, we present the results of our tests of Hypotheses 5 and 6, which proposed that leaders respond to more violent protest with a mixed strategy, relying simultaneously on the frequent use of violent repression while also improving respect for political and civil rights (Hypothesis 5) and that leaders respond to more peaceful protest with a mixed strategy, relying both on the more frequent use of violent repression while also improving respect for political and civil rights (Hypothesis 6). We find support for Hypothesis 5 but only limited support for Hypothesis 6. In fact, when citizens rebel against their governments through the incidence of civil war or the onset of a new civil war, we find that leaders respond by employing both more violent repression while also easing the extent of politically repressive tactics. We also find some evidence that governments respond to general strikes in the previous year with a mixed response of both more violent repression while also improving their respect for political and civil rights.

Our controls, when significant, provide strong support for existing research on the frequency of government repression. First, we discuss the political controls that were significant in explaining changes in the frequency of violent and extent of political repression. We found mixed support for Ritter and Conrad's (2016) arguments when we examined how leaders' historic or past use of violent repression affects subsequent use of violent and political repression. They argued that past use of violent repression will cow the opposition and reduces the need for subsequent repression. In Table 2, we found that a leader who relies on the more frequent use of violent repression in the previous year tends to reduce his use of violent repression in the subsequent year. However, in Table 3, we determined that a leader who relies on more frequent violent repression in the previous year tends to restrict civil and political rights more in the subsequent year. We also concluded that when leaders make it more difficult for groups to assemble and associate, these leaders subsequently resort to more frequent violence and more extensive civil and political repression.

Next, we turn to the constraining effect of judicial independence on government repression. First, we

found that in states where judiciaries are freer from political interference, leaders use violent repression less frequently and civil and political repression less extensively. Second, our findings on the effects of wealth on leaders' use of repression were mixed. On one hand, wealthier societies were associated with less frequent violent repression across all four models displayed in Table 2 and were less likely to be associated with governments employing a mixed repressive response (Table 4). On the other hand, wealthier societies were associated with greater restrictions on political rights across all four models. (Table 3). Third, similar to previous research such as DeMeritt and Young (2013), we found that leaders from states that are dependent upon resource rents utilized both more frequent violent repression and more extensive political repression. Fourth, we determined a good deal of evidence that countries with larger populations use more violent and political repression significant across all eight models (Tables 2 and 3). Larger populations may place greater demands on leaders who are more likely to respond with repression in order to maintain political control (Poe et al 1999). Fifth, there were some results that were significant in only one of the tables presented. That is, we found that in countries where more groups were excluded from political power, political repression worsened in the subsequent year. Finally, our results indicated that when governments had previously used political repression or a mixed response, they used less political repression or a mixed response in the subsequent year, significant across all four models (Table 3 and 4, respectively).

#### **a. Robustness tests**

Scholars have emphasized that in order to protect human rights, states must have governance capacity (Mitchell: 2004; Englehart: 2009). In particular, states with limited governance capacity have difficulty controlling their agents (Englehart: 2009). In these states, leaders that wish to violate their citizens' rights, as well as leaders expect their agents to refrain from those violations, struggle to achieve these goals. Thus, by including a measure of state capacity, we are better positioned to ensure that our measure of governments' human-rights violations actually reflects the preferences of leaders. State capacity measures have limited availability and reduce our N by about 60 percent. We present the results from a measure of state capacity—bureaucratic quality—highlighted by Hendrix's (2010) research. The results from our robustness tests presented in Appendices C - E provide a good level of support for our core findings presented in Tables 2 - 4.

In general, the results suggest that states with stronger governance capacity less frequently use violent repression, significant across all four models. These results provide evidence about the importance of improved governance reducing the use of violent repression. In contrast, we find that stronger state capacity has no significant effect reducing the extent of political repression or the likelihood that governments respond with a mixed set of policy choices in response to more protest.

Regarding our measures of protest, the results from Appendix C - E provide ample support for the findings presented in Tables 2 - 4. In Appendix C, we find that both the change and lagged measures of general strikes, civil war incidence, and civil war onset are associated with more violent repression. The exception is more anti-government demonstrations, where we find that only when we lag our measure of anti-government demonstrations, do we see evidence that they increase the frequency of violent repression. Comparing our results from Appendix D with the results from Table 3, we see more variation in our robustness tests findings. Appendix D indicates no significant relationship between government easing restrictions on political repression in response to general strikes and anti-government demonstrations. In Appendix D, we also find that both variants of the onset of civil war is significantly associated with fewer restrictions on political rights. Comparing Appendix E with Table 4, we report

consistent findings. Both leaders who confront general strikes in the previous year and those faced with an upsurge in the incidence of civil war and the onset of a new civil war are more likely to respond with a mix of more violent repression while also easing restrictions on political repression.

We conducted one further test of robustness (Appendices L-N), where we estimate more traditionally ordered logit and logit models, respectively. In these models, we estimate the lagged effects of all our independent variables on the level of violent repressive tactics, the level of politically repressive tactics, and the likelihood of a mixed repressive response by leaders. We find significant consistency among the core models displayed in Tables 2-4. As with Table 2, in Appendix L we find that when citizens turn to anti-government demonstrations or renew the fighting with a new incidence of civil war, leaders respond to both by increasing their frequency of violent repressive tactics. In contrast with our findings in Table 2, while we continue to find a positive association between when citizens turn to the use of general strikes and the onset of civil war and the frequency of government use of violent repression, it is no longer statistically significant. In Appendix M, we find that when citizens turn to the use of general strikes and anti-government demonstrations, leaders ease their use of political repressive tactics, although this finding is no longer statically significant. Finally, in Appendix N, our results contrast in two ways with those presented in Table 4. That is, we no longer find a significant relationship with the incidence or onset of civil war and the likelihood of a government response of mixed repressive tactics. In comparison, in Appendix N we find that as citizens turn to the use of general strikes, leaders are more likely to respond with a mix of repressive tactics.

## 6. Conclusions

Clyde Beatty's tactics to deal with lions and tigers may correspond to tactics adopted by heads of states that seek to retain their power in the face of citizen protests. We find there are times that leaders rely on violence and other times when they moderate their strategies. However, leaders do not abide by the laws of the jungle. Our findings establish that leaders are flexible and respond to the signals from protestors with different strategies. Like scholars such as Davenport (2007), we find that leaders respond with violence when met with both violent and peaceful protests. But, our findings suggest something subtler than a simple threat-repression nexus as delineated by Poe (2004). At times, leaders also respond to peaceful protest by modestly improving political rights. Finally, some leaders respond to a combination of peaceful and violent protest with a mixed response—they will simultaneously rely on violent repressive tactics while improving their respect for some political and civil rights. We believe that leaders may hope that using violent repression together with some improvements in political rights (e.g. mixed strategies) will help them to stay in power longer. In this sense, they may be acting shrewdly to divide the opposition by accommodating some of their demands. Alternatively, they may be buying themselves more time to consider other strategies to help them strengthen their hold on power. We acknowledge that our findings are unusual and may be confusing. But, leaders are not dependent on violent repressive tactics. They have alternatives and can change course. Above all, they want to hold on to power and leverage to influence their constituents.

We suggest that policymakers and scholars will benefit from further research on exactly what leaders do in response to different types of domestic dissent. We know coercion is not the only answer. Sometimes leaders also try to “buy” their citizens' loyalty with social-welfare spending. At other times, they may try to buy social stability by undertaking modest improvements in political rights. In this paper, we only focused on political and civil rights. Hence, we believe to better understand how leaders respond to civil conflict, scholars should also examine whether governments respond to protests by improving other



aspects of well-being such as access to education, housing, or health care.

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**TABLE 1. Operationalization of Variables**

<b>Variables</b>	<b>Indicator</b>	<b>Source</b>
<b>Dependent Variables</b>		
Change in government use of violent repression	Annual change in, mokken scale: extra judicial killing, forced disappearances, torture and political imprisonment	Cingranelli & Richards (2014)
Change in government use of political repression	Annual change in mokken scale: freedom of movement, freedom of speech, workers' rights, political participation and freedom of religion.	Cingranelli & Richards (CIRI) (2014)
Change in government use of violent and political repression	Dichotomous indicator with a value of '1' if joint worsening of violent repression and improving political repression compared to the previous year, '0' otherwise.	Constructed
<b>Independent Variables</b>		
General strikes	Count of annual general strikes	Banks and Wilson (2015)
Anti-government demonstrations	Count of annual anti-government demonstration.	Banks and Wilson (2015)
Rebellion Incidence	Incidence of a rebellion with at least 25 annual battle deaths	Gleditsch et al. (2002) Themnér and Wallenstein. (2014)
Rebellion onset	Onset of a rebellion with at least 25 annual battle deaths	Gleditsch et al. (2002) Themnér and Wallenstein. (2014)
<b>Control Variables</b>		
<i>Political factors</i>		
Restrictions on assembly and association	0=No restrictions, 1=some restrictions 2=extensive restrictions	CIRI 2014
Number of groups excluded from political power	Number of groups excluded from political power	Cederman et al. (2013)
Level of executive constraints	Level of executive constraints	Marshall & Jaggers (2014)
De-Facto Judicial Independence	Level of De-Facto Judicial Independence. Range 0 to +2. '0'=Not independent, '1'=Partially independent, '2'=Fully independent	Camp Keith (2011)
Ratification of ICCPR	Dichotomous '1' If ICCPR ratified; '0' If Not	Constructed from UN Sources
Number of IGOs joined	Annual count of IGOs joined by country	Pevehouse et al. (2004) & Wallace and Singer (1970)
<i>Economic factors</i>		
Log GDP Per Capita	Log GDP Per Capita Current U.S. \$ (PPP)	Feenstra et al (2013)
Trade% of GDP	Trade as a proportion of GDP	Feenstra et al. (2013)

Total natural resources rents	Total natural resources rents (% of GDP)	World Bank (2015)
Log of Population	Log of population	Feenstra et al. (2013)

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**Table 2: Ordinary least squares error correction models, peaceful and violent protest and its effects on the change in frequency of government use of violent repression 1981-2011, all countries**

	Change in frequency of government use of violent repression			
General strikes $\Delta$	0.139**			
	(0.043)			
General strikes $_{t-1}$	0.136**			
	(0.049)			
Anti-government demonstrations $\Delta$		0.034*		
		(0.014)		
Anti-government demonstrations $_{t-1}$		0.074***		
		(0.017)		
Incidence of civil war $\Delta$			1.134***	
			(0.125)	
Incidence of civil war $_{t-1}$			0.972***	
			(0.110)	
Onset of civil war $\Delta$				0.864***
				(0.146)
Onset of civil war $_{t-1}$				0.952***
				(0.159)
<b>Control variables</b>				
Violent government repression $_{t-1}$	-0.295***	-0.300***	-0.381***	-0.300***
	(0.023)	(0.024)	(0.022)	(0.024)
Restrictions on assembly and association $\Delta$	0.173**	0.175**	0.176**	0.182**
	(0.059)	(0.059)	(0.056)	(0.058)
Restrictions on assembly and association $_{t-1}$	0.153**	0.152**	0.161**	0.147**
	(0.052)	(0.051)	(0.051)	(0.050)
Number groups excluded from political power $\Delta$	0.013	-0.007	-0.004	-0.033
	(0.070)	(0.073)	(0.062)	(0.069)
Number groups excluded from political power $_{t-1}$	0.007	0.004	0.003	0.006
	(0.006)	(0.007)	(0.005)	(0.005)
Level of executive constraints $\Delta$	-0.091	-0.095	-0.076	-0.089
	(0.050)	(0.051)	(0.051)	(0.051)
Level of executive constraints $_{t-1}$	-0.020	-0.020	-0.030	-0.020
	(0.021)	(0.020)	(0.018)	(0.019)
De facto judicial independence $\Delta$	-0.263***	-0.260***	-0.298***	-0.265***
	(0.064)	(0.064)	(0.060)	(0.063)
De facto judicial independence $_{t-1}$	-0.132***	-0.124**	-0.190***	-0.141***
	(0.039)	(0.039)	(0.040)	(0.038)
Ratification of ICCPR $\Delta$	-0.040	-0.017	0.052	-0.015
	(0.196)	(0.194)	(0.180)	(0.188)
Ratification of ICCPR $_{t-1}$	0.065	0.083	0.068	0.043
	(0.063)	(0.062)	(0.061)	(0.059)
Number of IGOS joined $\Delta$	0.002	0.002	0.003	0.001
	(0.006)	(0.006)	(0.005)	(0.006)

Number of IGOS joined $_{t-1}$	0.002 (0.001)	0.002 (0.001)	0.003* (0.001)	0.002 (0.001)
Log GDP per capita US \$ $\Delta$	-0.431 (0.442)	-0.404 (0.449)	-0.234 (0.438)	-0.558 (0.441)
Log GDP per capita US \$ $_{t-1}$	-0.128*** (0.030)	-0.138*** (0.029)	-0.114*** (0.030)	-0.115*** (0.029)
Trade % of GDP $\Delta$	0.001 (0.002)	0.001 (0.002)	0.001 (0.002)	0.001 (0.002)
Trade % of GDP $_{t-1}$	-0.000 (0.001)	-0.000 (0.001)	-0.000 (0.001)	-0.001 (0.001)
Total natural resource rents $\Delta$	0.013* (0.006)	0.014* (0.006)	0.012 (0.006)	0.012* (0.006)
Total natural resource rents $_{t-1}$	0.004* (0.002)	0.004* (0.002)	0.004* (0.002)	0.003 (0.002)
Log of population $\Delta$	1.458 (2.314)	1.388 (2.273)	0.504 (1.958)	1.093 (2.241)
Log of population $_{t-1}$	0.150*** (0.025)	0.142*** (0.025)	0.141*** (0.023)	0.139*** (0.023)
Constant	0.938* (0.463)	0.983* (0.461)	0.838 (0.468)	1.056* (0.465)
Observations	3,340	3,340	3,340	3,340
R-squared	0.172	0.173	0.235	0.186

Robust standard errors in parentheses \*\*\* p<0.001, \*\* p<0.01, \* p<0.05

**Table 3: Ordinary least squares error correction models peaceful and violent protest and its effects on the change in frequency of government use of political repression 1981-2011, all countries**

	Change in frequency of government use of political repression			
General strikes $\Delta$	-0.066			
	(0.060)			
General strikes $_{t-1}$	-0.113*			
	(0.053)			
Anti-government demonstrations $\Delta$		-0.039**		
		(0.015)		
Anti-government demonstrations $_{t-1}$		-0.056*		
		(0.024)		
Incidence of civil war $\Delta$			0.015	
			(0.111)	
Incidence of civil war $_{t-1}$			0.073	
			(0.089)	
Onset of civil war $\Delta$				-0.180
				(0.115)
Onset of civil war $_{t-1}$				-0.186
				(0.153)
<b>Control variables</b>				
Violent government repression $_{t-1}$	0.060**	0.063***	0.047*	0.058**
	(0.018)	(0.018)	(0.019)	(0.018)
Violent government repression $\Delta$	0.112***	0.114***	0.105***	0.114***
	(0.023)	(0.023)	(0.023)	(0.023)
Restrictions on assembly and association $\Delta$	0.502***	0.503***	0.507***	0.503***
	(0.061)	(0.061)	(0.061)	(0.062)
Restrictions on assembly and association $_{t-1}$	0.586***	0.588***	0.594***	0.590***
	(0.058)	(0.057)	(0.057)	(0.057)
Number of groups excluded from political power $\Delta$	0.093	0.102	0.093	0.103
	(0.066)	(0.069)	(0.066)	(0.065)
Number of groups excluded from political power $_{t-1}$	0.028***	0.030***	0.028***	0.029***
	(0.005)	(0.005)	(0.005)	(0.005)
Level of executive constraints $\Delta$	-0.358***	-0.355***	-0.362***	-0.362***
	(0.063)	(0.064)	(0.064)	(0.064)
Level of executive constraints $_{t-1}$	-0.142***	-0.143***	-0.149***	-0.146***
	(0.023)	(0.023)	(0.023)	(0.023)
De facto judicial independence $\Delta$	-0.239***	-0.241***	-0.243***	-0.239***
	(0.057)	(0.056)	(0.056)	(0.056)
De facto judicial independence $_{t-1}$	-0.156***	-0.162***	-0.159***	-0.152***
	(0.040)	(0.040)	(0.040)	(0.041)
Ratification of ICCPR $\Delta$	-0.246	-0.256	-0.250	-0.251
	(0.228)	(0.231)	(0.233)	(0.234)
Ratification of ICCPR $_{t-1}$	0.043	0.030	0.052	0.053
	(0.073)	(0.071)	(0.072)	(0.072)

Number of IGOS joined $\Delta$	0.007 (0.006)	0.006 (0.006)	0.006 (0.006)	0.006 (0.006)
Number of IGOS joined $_{t-1}$	0.002* (0.001)	0.002 (0.001)	0.003* (0.001)	0.003* (0.001)
Log GDP per capita US \$ $\Delta$	1.572** (0.520)	1.557** (0.514)	1.665** (0.535)	1.656** (0.537)
Log GDP per capita US \$ $_{t-1}$	0.075* (0.030)	0.083** (0.030)	0.076* (0.030)	0.073* (0.030)
Trade % of GDP $\Delta$	0.000 (0.002)	0.000 (0.002)	0.000 (0.002)	0.000 (0.002)
Trade % of GDP $_{t-1}$	0.001 (0.001)	0.001 (0.001)	0.001 (0.001)	0.001 (0.001)
Total natural resources rents $\Delta$	0.002 (0.005)	0.002 (0.005)	0.002 (0.005)	0.003 (0.005)
Total natural resources rents $_{t-1}$	0.005* (0.002)	0.004* (0.002)	0.005* (0.002)	0.005* (0.002)
Log of population $\Delta$	3.771 (2.615)	3.815 (2.623)	3.673 (2.603)	3.803 (2.604)
Log of population $_{t-1}$	0.020 (0.026)	0.025 (0.027)	0.018 (0.025)	0.020 (0.026)
Political repression $_{t-1}$	-0.302*** (0.017)	-0.302*** (0.017)	-0.302*** (0.017)	-0.302*** (0.017)
Constant	0.957* (0.461)	0.936* (0.459)	0.884 (0.457)	0.883 (0.459)
Observations	3,330	3,330	3,330	3,330
R-squared	0.203	0.204	0.201	0.202

Robust standard errors in parentheses \*\*\* p<0.001, \*\* p<0.01, \* p<0.05

**Table 4: Ordinary least squares error correction models peaceful and violent protest and its effects on both worsening violent and improving political repression 1981-2011, all countries**

	Mixed human rights response by government			
General strikes $\Delta$	0.016 (0.011)			
General strikes $_{t-1}$	0.037** (0.012)			
Anti-government demonstrations $\Delta$		0.004 (0.004)		
Anti-government demonstrations $_{t-1}$		0.004 (0.004)		
Incidence of civil war $\Delta$			0.097*** (0.024)	
Incidence of civil war $_{t-1}$			0.033 (0.021)	
Onset of civil war $\Delta$				0.105** (0.035)
Onset of civil war $_{t-1}$				0.083 (0.043)
<b>Control variables</b>				
Mixed human rights response of government $_{t-1}$	-1.082*** (0.012)	-1.080*** (0.012)	-1.081*** (0.012)	-1.079*** (0.012)
Restrictions on assembly and association $\Delta$	-0.008 (0.012)	-0.009 (0.012)	-0.009 (0.012)	-0.008 (0.012)
Restrictions on assembly and association $_{t-1}$	-0.005 (0.009)	-0.006 (0.009)	-0.007 (0.009)	-0.006 (0.010)
Number groups excluded from political power $\Delta$	0.001 (0.011)	0.001 (0.011)	0.001 (0.011)	-0.003 (0.011)
Number groups excluded from political power $_{t-1}$	-0.001 (0.001)	-0.002 (0.001)	-0.002 (0.001)	-0.001 (0.001)
Level of executive constraints $\Delta$	0.006 (0.010)	0.007 (0.010)	0.007 (0.010)	0.007 (0.010)
Level of executive constraints $_{t-1}$	-0.011* (0.005)	-0.010* (0.005)	-0.010* (0.005)	-0.010* (0.005)
De facto judicial independence $\Delta$	-0.017 (0.014)	-0.016 (0.015)	-0.017 (0.014)	-0.016 (0.014)
De facto judicial independence $_{t-1}$	0.005 (0.009)	0.004 (0.010)	0.003 (0.010)	0.003 (0.010)
Ratification of ICCPR $\Delta$	0.044 (0.049)	0.045 (0.050)	0.053 (0.049)	0.046 (0.049)
Ratification of ICCPR $_{t-1}$	-0.000 (0.013)	-0.001 (0.013)	-0.003 (0.013)	-0.004 (0.013)
Number of IGOS joined $\Delta$	0.001 (0.002)	0.001 (0.002)	0.001 (0.002)	0.001 (0.002)
Number of IGOS joined $_{t-1}$	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)
Log GDP per capita US \$ $\Delta$	0.031	0.013	0.019	-0.001

	(0.096)	(0.097)	(0.098)	(0.097)
Log GDP per capita US \$ <sub>t-1</sub>	-0.025***	-0.026***	-0.024***	-0.024***
	(0.006)	(0.006)	(0.006)	(0.006)
Trade % of GDP $\Delta$	-0.000	-0.000	-0.000	-0.000
	(0.001)	(0.001)	(0.001)	(0.001)
Trade % of GDP <sub>t-1</sub>	0.000	0.000	0.000	0.000
	(0.000)	(0.000)	(0.000)	(0.000)
Total natural resources rents $\Delta$	0.002	0.002	0.002	0.002
	(0.001)	(0.001)	(0.001)	(0.001)
Total natural resources rents <sub>t-1</sub>	-0.000	-0.000	-0.000	-0.000
	(0.000)	(0.000)	(0.000)	(0.000)
Log of population $\Delta$	-0.104	-0.090	-0.146	-0.124
	(0.449)	(0.450)	(0.448)	(0.457)
Log of population <sub>t-1</sub>	0.004	0.005	0.004	0.004
	(0.004)	(0.004)	(0.004)	(0.004)
Constant	0.222	0.244*	0.235*	0.247*
	(0.113)	(0.114)	(0.113)	(0.115)
Observations	3,366	3,366	3,366	3,366
R-squared	0.539	0.537	0.540	0.539

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Robust standard errors in parentheses \*\*\* p<0.001, \*\* p<0.01, \* p<0.05

**Appendix A: Descriptive statistics**

Variable	Mean	Standard Deviation	Minimum	Maximum
Violent repression	3.093	2.331	0	8
Change in violent repression	0.022	1.21	-6	5
Political repression	4.834	3.562	0	12
Change in political repression	-0.87	1.558	-11	6
General strikes	0.114	0.496	0	8
Anti-government demonstrations	0.567	2.234	0	74
Civil war incidence	0.175	0.38	0	1
Civil war onset	0.042	0.2	0	1
Restrictions on assembly and association	1.1	.847	0	2
Number of excluded political groups	2.497	4.921	0	55
Level of executive constraints	4.445	2.257	1	7
Level of de facto judicial independence	1.036	0.861	0	2
Ratification of ICCPR	0.676	0.468	0	1
Number of IGOS joined	322.332	18.441	279	348
Log GDP per capita US \$	8.488	1.301	4.98	11.623
Trade % of GDP	78.753	47.676	1.035	443.175
Total natural resources rents	9.409	14.118	0	94.64
Log of population	1.872	1.941	-3.2	9.725





**Appendix B: Independent variables pairwise correlations**

Variables	General strikes	Anti-gov. dem.	Civil war incid	Civil war onset	Assembly & association	Groups excl. pol. power	Log of GDP Per Capita	Trade % of GDP	Num. of IGOS joined
General strikes	1								
Anti-gov. dem.	--	1							
Civil war incid.	--	--	1						
Civil war onset	--	--	--	1					
Assembly and association	--	--	--	--	1				
Groups excl. pol. power	0.016	0.211	0.185	0.088	0.146	1			
Log of GDP Per Capita	0.008	0.033	-0.202	-0.103	-0.369	-0.055	1		
Trade % of GDP	-0.150	-0.164	-0.212	-0.063	0.081	-0.146	0.187	1	
Num. of IGOS joined	-0.069	-0.052	-0.023	0.018	-0.115	0.031	0.065	0.133	1
Inf. of ICCPR	0.008	-0.061	-0.029	0.009	-0.334	-0.072	0.135	-0.113	0.261
Factor jud	0.047	-0.032	-0.12	-0.077	-0.451	-0.186	0.476	-0.028	-0.14
Factor natural	-0.059	-0.065	0.031	0.079	0.304	0.07	-0.092	0.089	0.001
Factor of exec	0.124	0.065	-0.067	-0.034	-0.681	-0.08	0.503	-0.059	0.179
Factor of pop.	0.127	0.279	0.289	0.134	0.036	0.438	0.005	-0.452	0.065

**Appendix B: Independent variables pairwise correlations continued**

	Rat. of ICCP R	De facto jud. indep.	Total natural resources rents	Lev of exec constraints	Log of pop
of PR facto	1				
p. il ral	0.066	1			
urces s of	-0.103	-0.31	1		
e straint	0.364	0.522	-0.422	1	
of	0.0744	-0.0703	-0.08	0.1086	1

**Appendix C: Ordinary least squares error correction models, peaceful and violent protest and its effects on the change in frequency of government use of violent repression including state capacity 1984-1998, all countries**

	Change in frequency of government use of violent repression			
General strikes $\Delta$	0.111*			
	(0.050)			
General strikes $_{t-1}$	0.143*			
	(0.065)			
Anti-government demonstrations $\Delta$		0.011		
		(0.022)		
Anti-government demonstrations $_{t-1}$		0.086**		
		(0.027)		
Incidence of civil war $\Delta$			1.066***	
			(0.200)	
Incidence of civil war $_{t-1}$			1.083***	
			(0.144)	
Onset of civil war $\Delta$				0.961***
				(0.228)
Onset of civil war $_{t-1}$				1.110***
				(0.248)
<b>Control variables</b>				
State Capacity $\Delta$	-0.053	-0.079	-0.022	-0.068
	(0.050)	(0.049)	(0.049)	(0.049)
State Capacity $_{t-1}$	-0.445**	-0.447**	-0.415**	-0.434**
	(0.152)	(0.148)	(0.149)	(0.150)
Violent government repression $_{t-1}$	-0.316***	-0.327***	-0.414***	-0.324***
	(0.032)	(0.035)	(0.028)	(0.034)
Restrictions on assembly and association $\Delta$	0.210	0.221	0.186	0.227
	(0.125)	(0.122)	(0.113)	(0.120)
Restrictions on assembly and association $_{t-1}$	0.207*	0.204*	0.133	0.175*
	(0.082)	(0.083)	(0.076)	(0.079)
Number of groups excluded from political power $\Delta$	0.207	0.085	0.123	0.114
	(0.125)	(0.149)	(0.114)	(0.120)
Number of groups excluded from political power $_{t-1}$	-0.006	-0.008	0.002	-0.003
	(0.011)	(0.011)	(0.008)	(0.010)
Level of executive constraints $\Delta$	-0.125	-0.133	-0.102	-0.129
	(0.073)	(0.073)	(0.069)	(0.069)
Level of executive constraints $_{t-1}$	0.015	0.013	-0.009	0.010
	(0.034)	(0.035)	(0.034)	(0.033)
De facto judicial independence $\Delta$	-0.366***	-0.363**	-0.416***	-0.378***
	(0.106)	(0.108)	(0.099)	(0.104)
De facto judicial independence $_{t-1}$	-0.234**	-0.220**	-0.312***	-0.240***
	(0.069)	(0.069)	(0.074)	(0.068)
Ratification of ICCPR $\Delta$	-0.209	-0.183	-0.200	-0.192
	(0.336)	(0.327)	(0.295)	(0.325)
Ratification of ICCPR $_{t-1}$	0.080	0.096	0.071	0.030

Number of IGOS joined $\Delta$	(0.093) 0.007	(0.094) 0.009	(0.093) 0.009	(0.090) 0.005
Number of IGOS joined $_{t-1}$	(0.009) 0.001	(0.009) 0.001	(0.009) 0.002	(0.009) 0.001
Log GDP per capita US \$ $\Delta$	(0.002) -0.375	(0.002) -0.307	(0.002) -0.408	(0.002) -0.452
Log GDP per capita US \$ $_{t-1}$	(0.797) -0.078	(0.806) -0.078	(0.783) -0.070	(0.778) -0.059
Trade % of GDP $\Delta$	(0.051) 0.004	(0.049) 0.005	(0.052) 0.004	(0.048) 0.003
Trade % of GDP $_{t-1}$	(0.005) -0.001	(0.005) -0.001	(0.004) -0.001	(0.005) -0.001
Total natural resources rents $\Delta$	(0.001) 0.038**	(0.001) 0.038**	(0.001) 0.038***	(0.001) 0.038***
Total natural resources rents $_{t-1}$	(0.011) 0.002	(0.011) 0.003	(0.011) 0.006	(0.011) 0.001
Log of population $\Delta$	(0.004) 6.341	(0.004) 6.278	(0.004) 7.170*	(0.004) 6.061
Log of population $_{t-1}$	(4.294) 0.190***	(4.244) 0.181***	(3.491) 0.172***	(4.109) 0.165***
Constant	(0.046) 0.699	(0.045) 0.722	(0.041) 0.565	(0.043) 1.024
Observations	(0.752) 1,223	(0.753) 1,223	(0.756) 1,223	(0.774) 1,223
R-squared	0.206	0.213	0.271	0.222

Robust standard errors in parentheses \*\*\* p<0.001, \*\* p<0.01, \* p<0.05

**Appendix D: Ordinary least squares error correction models, peaceful and violent protest and its effects on the change in frequency of government use of political repression including state capacity 1984-1998, all countries**

	<b>Change in frequency of government use of political repression</b>			
General strikes $\Delta$	-0.003 (0.073)			
General strikes $_{t-1}$	-0.007 (0.072)			
Anti-government demonstrations $\Delta$		-0.017 (0.020)		
Anti-government demonstrations $_{t-1}$		-0.036 (0.029)		
Incidence of civil war $\Delta$			-0.161 (0.178)	
Incidence of civil war $_{t-1}$			0.014 (0.148)	
Onset of civil war $\Delta$				-0.458* (0.198)
Onset of civil war $_{t-1}$				-0.489 (0.265)
<b>Control variables</b>				
State Capacity $\Delta$	-0.010 (0.053)	-0.004 (0.053)	-0.009 (0.052)	-0.022 (0.053)
State Capacity $_{t-1}$	0.064 (0.140)	0.068 (0.140)	0.056 (0.138)	0.074 (0.139)
Violent government repression $_{t-1}$	0.078** (0.024)	0.085*** (0.024)	0.075* (0.031)	0.078** (0.025)
Violent government repression $\Delta$	0.096** (0.036)	0.101** (0.037)	0.099* (0.038)	0.106** (0.036)
Restrictions on assembly and association $\Delta$	0.630*** (0.110)	0.624*** (0.109)	0.626*** (0.112)	0.638*** (0.116)
Restrictions on assembly and association $_{t-1}$	0.743*** (0.107)	0.739*** (0.107)	0.747*** (0.106)	0.770*** (0.108)
Number of groups excluded from political power $\Delta$	0.267*** (0.067)	0.297*** (0.087)	0.270*** (0.067)	0.303*** (0.071)
Number of groups excluded from political power $_{t-1}$	0.048** (0.015)	0.049** (0.015)	0.048** (0.015)	
Level of executive constraints $\Delta$	-0.307** *	-0.302**	-0.305**	-0.308**
	(0.090)	(0.090)	(0.090)	(0.094)
Level of executive constraints $_{t-1}$	-0.133** *	-0.127** *	-0.134** *	-0.105**
	(0.038)	(0.037)	(0.038)	(0.036)
De facto judicial independence $\Delta$	-0.021 (0.092)	-0.024 (0.092)	-0.020 (0.095)	-0.035 (0.094)
De facto judicial independence $_{t-1}$	-0.058	-0.065	-0.061	-0.101

	(0.077)	(0.077)	(0.079)	(0.076)
Ratification of ICCPR $\Delta$	-0.411	-0.420	-0.418	-0.420
	(0.301)	(0.301)	(0.302)	(0.304)
Ratification of ICCPR $_{t-1}$	-0.050	-0.063	-0.049	-0.026
	(0.118)	(0.118)	(0.118)	(0.113)
Number of IGOS joined $\Delta$	0.033***	0.033***	0.033***	0.033***
	(0.009)	(0.009)	(0.009)	(0.009)
Number of IGOS joined $_{t-1}$	0.008***	0.008***	0.008***	0.007***
	(0.002)	(0.002)	(0.002)	(0.002)
Log GDP per capita US \$ $\Delta$	1.001	0.926	1.000	1.310
	(0.963)	(0.975)	(0.975)	(1.007)
Log GDP per capita US \$ $_{t-1}$	0.129**	0.130**	0.130**	0.124*
	(0.048)	(0.049)	(0.049)	(0.048)
Trade % of GDP $\Delta$	-0.002	-0.002	-0.001	-0.002
	(0.005)	(0.005)	(0.005)	(0.005)
Trade % of GDP $_{t-1}$	-0.001	-0.001	-0.001	-0.001
	(0.001)	(0.001)	(0.001)	(0.001)
Total natural resources rents $\Delta$	-0.007	-0.007	-0.006	-0.008
	(0.012)	(0.012)	(0.012)	(0.012)
Total natural resources rents $_{t-1}$	0.006	0.005	0.006	0.006
	(0.005)	(0.005)	(0.005)	(0.005)
Log of population $\Delta$	10.898*	10.936*	10.858*	9.744*
	(4.959)	(5.008)	(4.945)	(4.614)
Log of population $_{t-1}$	-0.024	-0.020	-0.024	0.053
	(0.052)	(0.053)	(0.052)	(0.047)
Political repression $_{t-1}$	-0.341**	-0.339**	-0.342**	-0.317**
	*	*	*	*
	(0.032)	(0.032)	(0.031)	(0.030)
Constant	-2.752**	-2.735**	-2.765**	-2.738**
	*	*	*	*
	(0.791)	(0.788)	(0.790)	(0.756)
Observations	1,220	1,220	1,220	1,220
R-squared	0.236	0.237	0.236	0.227

Robust standard errors in parentheses \*\*\* p<0.001, \*\* p<0.01, \* p<0.05

**Appendix E: Ordinary least squares error correction models peaceful and violent protest and its effects on both worsening violent and improving political repression including state capacity 1984-1998, all countries**

	Mixed human rights response by government			
General strikes $\Delta$	0.016			
	(0.014)			
General strikes $_{t-1}$	0.045**			
	(0.014)			
Anti-government demonstrations $\Delta$		-0.000		
		(0.007)		
Anti-government demonstrations $_{t-1}$		0.009		
		(0.006)		
Incidence of civil war $\Delta$			0.096**	
			(0.035)	
Incidence of civil war $_{t-1}$			0.045	
			(0.031)	
Onset of civil war $\Delta$				0.152*
				(0.060)
Onset of civil war $_{t-1}$				0.071
				(0.060)
<b>Control variables</b>				
Mixed human rights response of government $_{t-1}$	-1.093***	-1.091***	-1.093***	-1.084***
	(0.019)	(0.019)	(0.019)	(0.019)
State Capacity $\Delta$	0.004	0.005	0.010	0.008
	(0.033)	(0.033)	(0.034)	(0.034)
State Capacity $_{t-1}$	0.017	0.011	0.015	0.012
	(0.011)	(0.010)	(0.011)	(0.011)
Restrictions on assembly and association $\Delta$	0.010	0.011	0.009	0.016
	(0.023)	(0.022)	(0.023)	(0.023)
Restrictions on assembly and association $_{t-1}$	0.016	0.015	0.009	0.013
	(0.016)	(0.016)	(0.017)	(0.017)
Number of groups excluded from political power $\Delta$	-0.018	-0.033	-0.023	-0.032*
	(0.012)	(0.019)	(0.012)	(0.015)
Number of groups excluded from political power $_{t-1}$	-0.004*	-0.004*	-0.004*	-0.004*
	(0.002)	(0.002)	(0.002)	(0.002)
Level of executive constraints $\Delta$	-0.000	-0.000	0.001	-0.001
	(0.018)	(0.018)	(0.017)	(0.017)
Level of executive constraints $_{t-1}$	0.000	0.002	0.002	0.003
	(0.007)	(0.007)	(0.007)	(0.007)
De facto judicial independence $\Delta$	-0.029	-0.029	-0.031	-0.029
	(0.020)	(0.020)	(0.020)	(0.019)
De facto judicial independence $_{t-1}$	-0.020	-0.019	-0.021	-0.020
	(0.016)	(0.016)	(0.017)	(0.016)
Ratification of ICCPR $\Delta$	-0.011	-0.012	-0.013	-0.003
	(0.064)	(0.067)	(0.067)	(0.066)
Ratification of ICCPR $_{t-1}$	-0.013	-0.015	-0.018	-0.020
	(0.022)	(0.024)	(0.023)	(0.024)

Number of IGOS joined $\Delta$	0.001 (0.002)	0.001 (0.002)	0.001 (0.002)	0.000 (0.002)
Number of IGOS joined $_{t-1}$	-0.000 (0.001)	-0.000 (0.001)	-0.000 (0.001)	-0.000 (0.001)
Log GDP per capita US \$ $\Delta$	0.397* (0.153)	0.382* (0.152)	0.372* (0.156)	0.370* (0.152)
Log GDP per capita US \$ $_{t-1}$	-0.036** (0.011)	-0.035** (0.011)	-0.034** (0.011)	-0.033** (0.011)
Trade % of GDP $\Delta$	-0.001 (0.001)	-0.001 (0.001)	-0.001 (0.001)	-0.001 (0.001)
Trade % of GDP $_{t-1}$	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)
Total natural resources rents $\Delta$	0.006* (0.003)	0.006 (0.003)	0.005 (0.003)	0.006* (0.003)
Total natural resources rents $_{t-1}$	0.002 (0.001)	0.002 (0.001)	0.002 (0.001)	0.002 (0.001)
Log of population $\Delta$	-0.210 (0.845)	-0.186 (0.839)	-0.164 (0.826)	-0.153 (0.852)
Log of population $_{t-1}$	0.004 (0.008)	0.004 (0.008)	0.003 (0.009)	0.004 (0.008)
Constant	0.360 (0.203)	0.386 (0.200)	0.385 (0.196)	0.411* (0.203)
Observations	1,225	1,225	1,225	1,225
R-squared	0.554	0.552	0.553	0.556

Robust standard errors in parentheses \*\*\* p<0.001, \*\* p<0.01, \* p<0.05



**Appendix F: Ordinary least squares error correction models general strikes and its effects on the change in frequency of government use of violent repression components 1981-2011 all countries**

	Disappearances	Torture	Imprisonmen t	Killing
General strikes $\Delta$	0.022 (0.015)	0.054** (0.018)	0.040* (0.017)	0.046* (0.020)
General strikes $_{t-1}$	0.010 (0.015)	0.067** (0.020)	0.065** (0.021)	0.052* (0.022)
<b>Control variables</b>				
Restrictions on assembly and association $\Delta$	0.031 (0.020)	0.021 (0.022)	0.128*** (0.028)	0.022 (0.026)
Restrictions on assembly and association $_{t-1}$	-0.013 (0.015)	0.068** (0.024)	0.148*** (0.025)	0.018 (0.023)
Number of groups excluded from political power $\Delta$	-0.008 (0.031)	0.011 (0.029)	-0.015 (0.024)	0.025 (0.025)
Number of groups excluded from political power $_{t-1}$	0.005 (0.003)	0.002 (0.003)	-0.000 (0.002)	0.003 (0.002)
Level of executive constraints $\Delta$	-0.000 (0.017)	-0.002 (0.019)	-0.089*** (0.020)	0.011 (0.018)
Level of executive constraints $_{t-1}$	-0.007 (0.007)	0.001 (0.010)	-0.031** (0.011)	0.016 (0.009)
De facto judicial independence $\Delta$	-0.065** (0.022)	-0.068** (0.025)	-0.078** (0.025)	-0.084** (0.028)
De facto judicial independence $_{t-1}$	-0.012 (0.015)	-0.091** (0.020)	-0.044* (0.017)	-0.065** (0.019)
Ratification of ICCPR $\Delta$	-0.045 (0.087)	0.057 (0.079)	-0.031 (0.083)	-0.025 (0.077)
Ratification of ICCPR $_{t-1}$	0.010 (0.023)	0.054 (0.031)	-0.002 (0.036)	0.023 (0.028)
Number of IGOS joined $\Delta$	-0.001 (0.002)	0.001 (0.002)	0.005 (0.003)	-0.002 (0.002)
Number of IGOS joined $_{t-1}$	-0.000 (0.000)	0.003*** (0.001)	-0.000 (0.001)	0.001 (0.001)
Log GDP per capita US \$ $\Delta$	-0.248 (0.190)	-0.214 (0.191)	0.251 (0.180)	-0.220 (0.198)
Log GDP per capita US \$ $_{t-1}$	-0.021* (0.010)	-0.062** (0.013)	-0.023 (0.014)	-0.065** (0.014)
Trade % of GDP $\Delta$	0.002* (0.001)	-0.001 (0.001)	0.000 (0.001)	-0.001 (0.001)
Trade % of GDP $_{t-1}$	-0.000 (0.000)	-0.000 (0.000)	-0.000 (0.000)	-0.000 (0.000)
Total natural resources rents $\Delta$	0.002 (0.001)	0.005* (0.002)	0.003 (0.002)	0.004 (0.003)

Total natural resources rents $_{t-1}$	0.001 (0.001)	0.002 (0.001)	0.001 (0.001)	0.002* (0.001)
Log of population $\Delta$	0.336 (0.715)	-0.190 (0.878)	0.368 (1.130)	1.833 (1.070)
Log of population $_{t-1}$	0.034*** (0.008)	0.054*** (0.012)	0.055*** (0.012)	0.062*** (0.011)
Disappearances $_{t-1}$	-0.340*** (0.041)			
Torture $_{t-1}$		-0.480** * (0.024)		
Political imprisonment $_{t-1}$			-0.408*** (0.023)	
Killing $_{t-1}$				-0.397** * (0.026)
Constant	0.291* (0.140)	0.084 (0.208)	0.462 (0.252)	0.273 (0.215)
Observations	3,356	3,357	3,353	3,350
R-squared	0.185	0.253	0.221	0.205

Robust standard errors in parentheses \*\*\* p<0.001, \*\* p<0.01, \* p<0.05

**Appendix G: Ordinary least squares models anti-government demonstrations and its effects on the change in frequency of government use of violent repression 1981-2011, all Countries**

	Disappearances	Torture	Imprisonment	Killing
Anti-govt. demonstrations $\Delta$	0.006 (0.007)	0.002 (0.006)	0.016** (0.006)	0.022*** (0.006)
Anti-govt. demonstrations $_{t-1}$	0.010 (0.009)	0.026*** (0.007)	0.026*** (0.008)	0.036*** (0.007)
<b>Control variables</b>				
Restrictions on assembly and association $\Delta$	0.032 (0.020)	0.023 (0.021)	0.127*** (0.027)	0.022 (0.025)
Restrictions on assembly and association $_{t-1}$	-0.013 (0.015)	0.066** (0.023)	0.146*** (0.024)	0.017 (0.023)
Number of groups excluded from political power $\Delta$	-0.010 (0.030)	-0.001 (0.032)	-0.021 (0.026)	0.018 (0.027)
Number of groups excluded from political power $_{t-1}$	0.004 (0.003)	0.001 (0.003)	-0.002 (0.002)	0.001 (0.003)
Level of executive constraints $\Delta$	-0.001 (0.017)	-0.003 (0.019)	-0.090*** (0.020)	0.008 (0.018)
Level of executive constraints $_{t-1}$	-0.007 (0.007)	0.001 (0.009)	-0.030** (0.010)	0.015 (0.009)
De facto judicial independence $\Delta$	-0.065** (0.022)	-0.066** (0.025)	-0.077** (0.025)	-0.082** (0.028)
De facto judicial independence $_{t-1}$	-0.010 (0.015)	-0.088** (0.020)	-0.040* (0.017)	-0.060** (0.019)
Ratification of ICCPR $\Delta$	-0.041 (0.086)	0.065 (0.078)	-0.025 (0.082)	-0.016 (0.076)
Ratification of ICCPR $_{t-1}$	0.013 (0.022)	0.059 (0.031)	0.003 (0.036)	0.032 (0.028)
Number of IGOS joined $\Delta$	-0.001 (0.002)	0.001 (0.002)	0.005 (0.003)	-0.002 (0.002)
Number of IGOS joined $_{t-1}$	-0.000 (0.000)	0.003*** (0.001)	-0.000 (0.001)	0.001 (0.001)
Log GDP per capita US \$ $\Delta$	-0.238 (0.192)	-0.219 (0.190)	0.253 (0.179)	-0.199 (0.200)
Log GDP per capita US \$ $_{t-1}$	-0.022* (0.010)	-0.065** (0.013)	-0.026 (0.013)	-0.070** (0.014)
Trade % of GDP $\Delta$	0.002* (0.001)	-0.001 (0.001)	0.000 (0.001)	-0.001 (0.001)
Trade % of GDP $_{t-1}$	-0.000 (0.000)	-0.000 (0.000)	-0.000 (0.000)	-0.000 (0.000)
Total natural resources rents $\Delta$	0.002 (0.001)	0.005* (0.002)	0.003 (0.002)	0.004 (0.003)

Total natural resources rents $_{t-1}$	0.001 (0.001)	0.002 (0.001)	0.001 (0.001)	0.002** (0.001)
Log of population $\Delta$	0.315 (0.715)	-0.214 (0.861)	0.344 (1.101)	1.802 (1.054)
Log of population $_{t-1}$	0.032*** (0.008)	0.051*** (0.012)	0.052*** (0.012)	0.058*** (0.011)
Disappearances $_{t-1}$	-0.341*** (0.041)			
Torture $_{t-1}$		-0.481** * (0.025)		
Political imprisonment $_{t-1}$			-0.408*** (0.023)	
Killing $_{t-1}$				-0.403** * (0.026)
Constant	0.291* (0.143)	0.113 (0.209)	0.483 (0.250)	0.278 (0.212)
Observations	3,356	3,357	3,353	3,350
R-squared	0.185	0.254	0.222	0.209

Robust standard errors in parentheses \*\*\* p<0.001, \*\* p<0.01, \* p<0.05

**Appendix H: Ordinary least squares models civil war incidence and its effects on the change in frequency of government use of violent repression 1981-2011, all Countries**

	Disappearances	Torture	Imprisonment	Killing
Incidence of civil war $\Delta$	0.378*** (0.061)	0.157*** (0.043)	0.240*** (0.045)	0.404*** (0.051)
Incidence of civil war $_{t-1}$	0.398*** (0.068)	0.155*** (0.038)	0.242*** (0.045)	0.372*** (0.048)
<b>Control variables</b>				
Restrictions on assembly and association $\Delta$	0.022 (0.021)	0.020 (0.021)	0.129*** (0.026)	0.017 (0.024)
Restrictions on assembly and association $_{t-1}$	-0.028 (0.018)	0.062** (0.022)	0.150*** (0.023)	0.007 (0.022)
Number of groups excluded from political power $\Delta$	-0.012 (0.031)	0.007 (0.029)	-0.020 (0.021)	0.018 (0.022)
Number of groups excluded from political power $_{t-1}$	0.003 (0.002)	0.001 (0.002)	-0.002 (0.003)	0.001 (0.003)
Level of executive constraints $\Delta$	0.001 (0.017)	0.001 (0.019)	-0.085*** (0.021)	0.016 (0.019)
Level of executive constraints $_{t-1}$	-0.014* (0.007)	0.001 (0.009)	-0.034*** (0.009)	0.015 (0.009)
De facto judicial independence $\Delta$	-0.073*** (0.022)	-0.071** (0.025)	-0.083*** (0.024)	-0.094** (0.026)
De facto judicial independence $_{t-1}$	-0.019 (0.016)	-0.095** (0.020)	-0.050** (0.015)	-0.079** (0.021)
Ratification of ICCPR $\Delta$	-0.022 (0.084)	0.072 (0.077)	-0.014 (0.083)	0.005 (0.069)
Ratification of ICCPR $_{t-1}$	0.012 (0.019)	0.051 (0.030)	-0.008 (0.038)	0.022 (0.026)
Number of IGOS joined $\Delta$	-0.001 (0.002)	0.001 (0.002)	0.005 (0.003)	-0.002 (0.002)
Number of IGOS joined $_{t-1}$	-0.000 (0.000)	0.003*** (0.001)	-0.000 (0.001)	0.001* (0.001)
Log GDP per capita US \$ $\Delta$	-0.153 (0.196)	-0.207 (0.190)	0.287 (0.179)	-0.176 (0.186)
Log GDP per capita US \$ $_{t-1}$	-0.007 (0.011)	-0.056** (0.013)	-0.013 (0.013)	-0.058** (0.013)
Trade % of GDP $\Delta$	0.002* (0.001)	-0.001 (0.001)	0.000 (0.001)	-0.001 (0.001)
Trade % of GDP $_{t-1}$	-0.000 (0.000)	-0.000 (0.000)	-0.000 (0.000)	-0.000 (0.000)
Total natural resources rents $\Delta$	0.002 (0.001)	0.005* (0.002)	0.003 (0.002)	0.004 (0.003)

Total natural resources rents $_{t-1}$	0.001 (0.001)	0.001 (0.001)	0.001 (0.001)	0.002* (0.001)
Log of population $\Delta$	-0.316 (0.734)	-0.427 (0.809)	0.070 (0.997)	1.502 (0.893)
Log of population $_{t-1}$	0.020** (0.008)	0.049*** (0.012)	0.048*** (0.012)	0.053*** (0.011)
Disappearances $_{t-1}$	-0.439*** (0.053)			
Torture $_{t-1}$		-0.490** * (0.024)		
Political imprisonment $_{t-1}$			-0.441*** (0.022)	
Killing $_{t-1}$				-0.463** * (0.028)
Constant	0.197 (0.168)	0.072 (0.211)	0.464 (0.251)	0.203 (0.199)
Observations	3,356	3,357	3,353	3,350
R-squared	0.251	0.259	0.239	0.252

Robust standard errors in parentheses \*\*\* p<0.001, \*\* p<0.01, \* p<0.05

**Appendix I: Ordinary least squares models civil war onset and its effects on the change in frequency of government use of violent repression 1981-2011, all Countries**

	Disappearances	Torture	Imprisonment	Killing
Onset of civil war $\Delta$	0.288*** (0.068)	0.121** (0.041)	0.205*** (0.047)	0.300*** (0.063)
Onset of civil war $_{t-1}$	0.371*** (0.074)	0.158** (0.053)	0.236** (0.073)	0.374*** (0.092)
<b>Control variables</b>				
Restrictions on assembly and association $\Delta$	0.033 (0.020)	0.021 (0.021)	0.129*** (0.027)	0.023 (0.025)
Restrictions on assembly and association $_{t-1}$	-0.015 (0.015)	0.064** (0.023)	0.145*** (0.024)	0.015 (0.023)
Number of groups excluded from political power $\Delta$	-0.024 (0.029)	0.003 (0.030)	-0.027 (0.024)	0.008 (0.026)
Number of groups excluded from political power $_{t-1}$	0.004 (0.002)	0.002 (0.003)	-0.001 (0.002)	0.002 (0.002)
Level of executive constraints $\Delta$	-0.002 (0.017)	0.000 (0.019)	-0.087*** (0.020)	0.012 (0.018)
Level of executive constraints $_{t-1}$	-0.009 (0.006)	0.002 (0.009)	-0.030** (0.010)	0.016 (0.009)
De facto judicial independence $\Delta$	-0.066** (0.022)	-0.068** (0.025)	-0.078** (0.025)	-0.085** (0.028)
De facto judicial independence $_{t-1}$	-0.013 (0.014)	-0.092*** (0.020)	-0.046** (0.016)	-0.068** (0.019)
Ratification of ICCPR $\Delta$	-0.039 (0.085)	0.061 (0.077)	-0.026 (0.082)	-0.018 (0.075)
Ratification of ICCPR $_{t-1}$	0.005 (0.021)	0.047 (0.030)	-0.010 (0.035)	0.014 (0.027)
Number of IGOS joined $\Delta$	-0.002 (0.002)	0.001 (0.002)	0.005 (0.003)	-0.002 (0.002)
Number of IGOS joined $_{t-1}$	-0.000 (0.000)	0.003*** (0.001)	-0.000 (0.001)	0.001 (0.001)
Log GDP per capita US \$ $\Delta$	-0.261 (0.191)	-0.266 (0.188)	0.200 (0.182)	-0.266 (0.197)
Log GDP per capita US \$ $_{t-1}$	-0.015 (0.009)	-0.059*** (0.013)	-0.019 (0.013)	-0.060** (0.014)
Trade % of GDP $\Delta$	0.002* (0.001)	-0.001 (0.001)	0.000 (0.001)	-0.001 (0.001)
Trade % of GDP $_{t-1}$	-0.000 (0.000)	-0.000 (0.000)	-0.000 (0.000)	-0.000 (0.000)
Total natural resources rents $\Delta$	0.002 (0.001)	0.005* (0.002)	0.003 (0.002)	0.004 (0.003)
Total natural resources rents $_{t-1}$	0.000 (0.000)	0.001 (0.000)	0.000 (0.000)	0.002 (0.000)

	(0.001)	(0.001)	(0.001)	(0.001)
Log of population $\Delta$	0.160	-0.228	0.294	1.700
	(0.704)	(0.876)	(1.107)	(1.042)
Log of population $_{t-1}$	0.028***	0.053***	0.053***	0.058***
	(0.007)	(0.012)	(0.012)	(0.011)
Disappearances $_{t-1}$	-0.349***			
	(0.042)			
Torture $_{t-1}$		-0.476***		
		(0.025)		
Political imprisonment $_{t-1}$			-0.409***	
			(0.023)	
Killing $_{t-1}$				-0.401**
				*
				(0.027)
Constant	0.303*	0.140	0.512*	0.316
	(0.143)	(0.208)	(0.253)	(0.213)
Observations	3,356	3,357	3,353	3,350
R-squared	0.198	0.252	0.223	0.214

Robust standard errors in parentheses \*\*\* p<0.001, \*\* p<0.01, \* p<0.05



**Appendix J: Ordinary least squares error correction models general strikes and its effects on the change in frequency of government use of political repression components 1981-2011, all countries**

	Foreign movement	Domestic movement	Freedom of speech and press	Free and fair elections	Religious freedom	Workers' rights
General strikes $\Delta$	-0.022 (0.013)	-0.024 (0.014)	0.029 (0.019)	0.015 (0.018)	-0.026 (0.025)	-0.005 (0.020)
General strikes $_{t-1}$	-0.025 (0.014)	-0.033* (0.014)	0.005 (0.020)	0.006 (0.021)	0.003 (0.023)	-0.009 (0.022)
<b>Control variables</b>						
Restrictions on assembly and association $\Delta$	0.116*** (0.022)	0.041 (0.021)	0.112*** (0.022)	0.210*** (0.021)	0.085*** (0.020)	0.070** (0.023)
Restrictions on assembly and association $_{t-1}$	0.098*** (0.018)	0.051** (0.015)	0.173*** (0.021)	0.257*** (0.023)	0.142*** (0.023)	0.130** * (0.021)
Number of groups excluded from political power $\Delta$	0.021 (0.030)	0.009 (0.017)	0.008 (0.016)	0.036 (0.025)	-0.003 (0.025)	0.030 (0.021)
Number of groups excluded from political power $_{t-1}$	0.004** (0.001)	0.005** (0.002)	0.004* (0.002)	0.005 (0.003)	0.009* (0.004)	0.006* (0.003)
Level of executive constraints $\Delta$	-0.029 (0.016)	-0.048* (0.020)	-0.096*** (0.021)	-0.136** * (0.021)	-0.026 (0.022)	-0.044* * (0.015)
Level of executive constraints $_{t-1}$	-0.021** * (0.005)	-0.025*** (0.007)	-0.046*** (0.008)	-0.085** * (0.011)	-0.024* (0.010)	-0.008 (0.007)
De facto judicial independence $\Delta$	0.008 (0.017)	-0.043* (0.018)	-0.034 (0.023)	-0.062** (0.024)	-0.070** (0.025)	-0.072* (0.023)
De facto judicial independence $_{t-1}$	0.007 (0.011)	-0.012 (0.012)	-0.064*** (0.019)	-0.045* (0.019)	-0.066** * (0.019)	-0.085** ** (0.016)
Ratification of ICCPR $\Delta$	-0.045 (0.077)	-0.127 (0.072)	0.043 (0.055)	-0.036 (0.069)	-0.058 (0.096)	-0.061 (0.070)
Ratification of ICCPR $_{t-1}$	0.029 (0.021)	0.018 (0.019)	0.013 (0.027)	-0.044 (0.033)	-0.004 (0.038)	-0.019 (0.027)
Number of IGOS joined $\Delta$	0.005** (0.002)	-0.000 (0.002)	-0.002 (0.002)	0.002 (0.002)	-0.007** (0.002)	0.009** (0.003)
Number of IGOS joined $_{t-1}$	0.001** (0.000)	0.001** (0.000)	0.000 (0.001)	0.000 (0.001)	-0.001 (0.001)	0.002** * (0.001)
Log GDP per capita US \$ $\Delta$	0.138 (0.157)	0.035 (0.147)	0.220 (0.186)	0.076 (0.172)	0.532** (0.193)	0.606** (0.179)
Log GDP per capita US \$ $_{t-1}$	0.012 (0.008)	0.001 (0.010)	-0.001 (0.013)	-0.005 (0.012)	0.049*** (0.013)	0.004 (0.010)
Trade % of GDP $\Delta$	0.000 (0.001)	-0.000 (0.001)	0.002* (0.001)	-0.000 (0.001)	-0.001 (0.001)	-0.001 (0.001)

Trade % of GDP $_{t-1}$	-0.000 (0.000)	-0.000 (0.000)	0.001* (0.000)	-0.000 (0.000)	0.000 (0.000)	0.000 (0.000)
Total natural resources rents $\Delta$	-0.001 (0.002)	-0.003 (0.002)	0.003 (0.002)	0.003* (0.001)	0.002 (0.002)	0.001 (0.002)
Total natural resources rents $_{t-1}$	0.001 (0.001)	0.001 (0.001)	0.001 (0.001)	0.002* (0.001)	-0.000 (0.001)	0.001 (0.001)
Log of population $\Delta$	1.410 (0.775)	0.628 (0.644)	0.962 (0.783)	-1.440 (1.039)	-0.210 (1.029)	2.582** (0.756)
Log of population $_{t-1}$	0.008 (0.007)	0.002 (0.008)	0.015 (0.010)	-0.018 (0.009)	0.033** (0.011)	0.011 (0.009)
Foreign movement $_{t-1}$	-0.255** (0.022)					
Domestic movement $_{t-1}$		-0.234*** (0.016)				
Freedom of speech and press $_{t-1}$			-0.536*** (0.023)			
Free and fair elections $_{t-1}$				-0.599** (0.023)		
Religious freedom $_{t-1}$					-0.392** (0.024)	
Workers rights $_{t-1}$						-0.407* (0.021)
Constant	-0.357* (0.148)	-0.188 (0.145)	0.520* (0.217)	0.767*** (0.191)	0.133 (0.212)	-0.320 (0.193)
Observations	3,366	3,366	3,366	3,366	3,358	3,364
R-squared	0.142	0.136	0.279	0.332	0.202	0.214

Robust standard errors in parentheses \*\*\* p<0.001, \*\* p<0.01, \* p<0.05

**Appendix K: Ordinary least squares models anti-government demonstrations and its effects on the change in frequency of government use of political repression 1981-2011, all Countries**

	Foreign movement	Domestic movement	Freedom of speech and press	Free and fair elections	Religious freedom	Workers' rights
Anti-government demonstrations $\Delta$	-0.007 (0.005)	-0.003 (0.005)	0.004 (0.006)	-0.003 (0.006)	-0.005 (0.006)	-0.018** (0.005)
Anti-government demonstrations $_{t-1}$	-0.007 (0.006)	-0.008 (0.006)	-0.008 (0.007)	-0.009 (0.010)	-0.001 (0.008)	-0.006 (0.008)
<b>Control variables</b>						
Restrictions on assembly and association $\Delta$	0.116*** (0.022)	0.042 (0.021)	0.112*** (0.022)	0.210*** (0.021)	0.084*** (0.020)	0.071** (0.022)
Restrictions on assembly and association $_{t-1}$	0.098*** (0.018)	0.052*** (0.015)	0.173*** (0.021)	0.256*** (0.023)	0.142*** (0.023)	0.130*** (0.021)
Number of groups excl from political power $\Delta$	0.021 (0.031)	0.011 (0.017)	0.013 (0.018)	0.038 (0.026)	-0.005 (0.025)	0.025 (0.023)
Number of groups excl from political power $_{t-1}$	0.004*** (0.001)	0.005** (0.002)	0.004* (0.002)	0.006 (0.003)	0.009* (0.004)	0.006* (0.003)
Level of executive constraints $\Delta$	-0.030 (0.016)	-0.049* (0.020)	-0.094*** (0.020)	-0.134*** (0.021)	-0.026 (0.022)	-0.044** (0.015)
Level of executive constraints $_{t-1}$	-0.022*** (0.005)	-0.026*** (0.007)	-0.045*** (0.008)	-0.084*** (0.011)	-0.024* (0.010)	-0.008 (0.007)
De facto judicial independence $\Delta$	0.008 (0.017)	-0.043* (0.018)	-0.036 (0.023)	-0.063** (0.024)	-0.070** (0.026)	-0.072** (0.023)
De facto judicial independence $_{t-1}$	0.006 (0.011)	-0.012 (0.012)	-0.066*** (0.019)	-0.047* (0.019)	-0.066*** (0.019)	-0.086*** (0.016)
Ratification of ICCPR $\Delta$	-0.048 (0.077)	-0.129 (0.073)	0.045 (0.054)	-0.036 (0.069)	-0.062 (0.096)	-0.062 (0.071)
Ratification of ICCPR $_{t-1}$	0.029 (0.021)	0.017 (0.019)	0.009 (0.027)	-0.047 (0.032)	-0.004 (0.039)	-0.020 (0.027)
Number of IGOS joined $\Delta$	0.005** (0.002)	-0.001 (0.002)	-0.002 (0.002)	0.002 (0.002)	-0.007** (0.002)	0.009*** (0.003)
Number of IGOS joined $_t$	0.001** (0.000)	0.001** (0.000)	-0.000 (0.001)	0.000 (0.001)	-0.001 (0.001)	0.002*** (0.001)
Log GDP per capita US \$ $\Delta$	0.142 (0.157)	0.045 (0.147)	0.201 (0.186)	0.056 (0.169)	0.530** (0.190)	0.594** (0.179)
Log GDP per capita US \$ $_{t-1}$	0.013 (0.008)	0.002 (0.010)	-0.001 (0.013)	-0.004 (0.012)	0.049*** (0.013)	0.005 (0.010)
Trade % of GDP $\Delta$	0.000 (0.000)	-0.000 (0.000)	0.002* (0.001)	-0.000 (0.001)	-0.001 (0.001)	-0.001 (0.001)

	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Trade % of GDP $_{t-1}$	-0.000	-0.000	0.001*	-0.000	0.000	0.000
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Total natural resources rents $\Delta$	-0.001	-0.003	0.003	0.003*	0.002	0.001
	(0.002)	(0.002)	(0.002)	(0.001)	(0.002)	(0.002)
Total natural resources rents $_{t-1}$	0.001	0.001	0.001	0.002*	-0.000	0.001
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Log of population $\Delta$	1.412	0.627	0.983	-1.414	-0.201	2.585***
	(0.779)	(0.643)	(0.787)	(1.038)	(1.025)	(0.757)
Log of population $_{t-1}$	0.008	0.003	0.017	-0.016	0.033**	0.012
	(0.007)	(0.008)	(0.010)	(0.010)	(0.011)	(0.009)
Foreign movement $_{t-1}$	-0.254***					
	(0.022)					
Domestic movement $_{t-1}$		-0.234***				
		(0.015)				
Freedom of speech and press $_{t-1}$			-0.536***			
			(0.023)			
Free and fair elections $_{t-1}$				-0.598***		
				(0.023)		
Religious freedom $_{t-1}$					-0.392***	
					(0.024)	
Workers' rights $_{t-1}$						-0.405***
						(0.020)
Constant	-0.369*	-0.206	0.538*	0.784***	0.131	-0.315
	(0.151)	(0.146)	(0.219)	(0.191)	(0.214)	(0.192)
Observations	3,366	3,366	3,366	3,366	3,358	3,364
R-squared	0.142	0.135	0.279	0.333	0.201	0.216

Robust standard errors in parentheses \*\*\* p<0.001, \*\* p<0.01, \* p<0.05

**Appendix L: Ordered logit models peaceful and violent protest and its effects on the frequency of government use of violent repression 1981-2011, all countries**

	<b>Frequency of government use of violent repression</b>			
General strikes <sub>t-1</sub>	0.115 (0.077)			
Anti-government demonstrations <sub>t-1</sub>		0.088*** (0.026)		
Incidence of civil war <sub>t-1</sub>			0.891*** (0.178)	
Onset of civil war <sub>t-1</sub>				0.138 (0.244)
<b>Control variables</b>				
Restrictions on assembly and association <sub>t-1</sub>	0.178** (0.067)	0.176** (0.066)	0.190** (0.065)	0.174** (0.066)
Number of groups excluded from political power <sub>t-1</sub>	0.008 (0.011)	0.005 (0.011)	0.007 (0.008)	0.008 (0.011)
Level of executive constraints <sub>t-1</sub>	-0.072* (0.030)	-0.076* (0.030)	-0.081** (0.028)	-0.069* (0.030)
De facto judicial independence <sub>t-1</sub>	-0.148** (0.054)	-0.140* (0.054)	-0.190*** (0.055)	-0.147** (0.054)
Ratification of ICCPR <sub>t-1</sub>	0.039 (0.095)	0.065 (0.094)	0.052 (0.095)	0.032 (0.094)
Number of IGOS joined <sub>t-1</sub>	0.007*** (0.002)	0.007*** (0.002)	0.008*** (0.002)	0.007*** (0.002)
Log GDP per capita US \$ <sub>t-1</sub>	-0.281*** (0.049)	-0.292*** (0.047)	-0.264*** (0.050)	-0.279*** (0.049)
Trade % of GDP <sub>t-1</sub>	0.001 (0.001)	0.001 (0.001)	0.001 (0.001)	0.001 (0.001)
Total natural resources rents <sub>t-1</sub>	0.005 (0.003)	0.005 (0.003)	0.005 (0.003)	0.004 (0.003)
Log of population <sub>t-1</sub>	0.250*** (0.045)	0.240*** (0.045)	0.249*** (0.042)	0.251*** (0.045)
Violent government repression <sub>t-1</sub>	1.139*** (0.045)	1.133*** (0.045)	1.069*** (0.042)	1.141*** (0.045)
Observations	3,506	3,506	3,506	3,506

Robust standard errors in parentheses \*\*\* p<0.001, \*\* p<0.01, \* p<0.05

**Appendix M: Ordered logit models peaceful and violent protest and its effect on the frequency of government use of political repression 1981-2011, all countries**

	Frequency of government use of political repression			
General strikes $t_{-1}$	-0.100 (0.071)			
Anti-government demonstrations $t_{-1}$		-0.019 (0.029)		
Incidence of civil war $t_{-1}$			0.209 (0.121)	
Onset of civil war $t_{-1}$				0.134 (0.163)
<b>Control variables</b>				
Assembly and association $t_{-1}$	0.508*** (0.061)	0.509*** (0.061)	0.512*** (0.061)	0.510*** (0.061)
Number of groups excluded from political power $t_{-1}$	0.035*** (0.009)	0.036*** (0.009)	0.034*** (0.009)	0.035*** (0.009)
Level of executive constraints $t_{-1}$	-0.169*** (0.031)	-0.172*** (0.030)	-0.178*** (0.029)	-0.174*** (0.030)
De facto judicial independence $t_{-1}$	-0.215*** (0.050)	-0.215*** (0.050)	-0.215*** (0.051)	-0.213*** (0.050)
Ratification of ICCPR $t_{-1}$	-0.065 (0.095)	-0.063 (0.094)	-0.056 (0.094)	-0.059 (0.094)
Number of IGOS joined $t_{-1}$	0.005** (0.002)	0.005** (0.002)	0.005** (0.002)	0.005** (0.002)
Log GDP per capita US \$ $t_{-1}$	-0.032 (0.040)	-0.029 (0.040)	-0.020 (0.040)	-0.028 (0.040)
Trade % of GDP $t_{-1}$	0.003** (0.001)	0.003** (0.001)	0.003** (0.001)	0.003** (0.001)
Total natural resources rents $t_{-1}$	0.010** (0.003)	0.010** (0.003)	0.009** (0.003)	0.010** (0.003)
Log of population $t_{-1}$	0.104** (0.038)	0.104** (0.039)	0.088* (0.039)	0.098* (0.038)
Political repression $t_{-1}$	1.093*** (0.038)	1.092*** (0.038)	1.089*** (0.038)	1.092*** (0.038)
Observations	3,523	3,523	3,523	3,523

Robust standard errors in parentheses \*\*\* p<0.001, \*\* p<0.01, \* p<0.05

**Appendix N: Logit models peaceful and violent protest and its effect on likelihood of a mixed repressive response by government 1981-2011, all countries**

	<b>Likelihood of a mixed repressive response by government</b>			
General strikes <sub>t-1</sub>	0.302** (0.098)			
Anti-government demonstrations <sub>t-1</sub>		0.029 (0.035)		
Incidence of civil war <sub>t-1</sub>			-0.071 (0.192)	
Onset of civil war <sub>t-1</sub>				-0.361 (0.354)
<b>Control variables</b>				
Assembly and association <sub>t-1</sub>	-0.653*** (0.111)	-0.663*** (0.113)	-0.665*** (0.114)	-0.664*** (0.114)
Number of groups excluded from political power <sub>t-1</sub>	-0.048 (0.025)	-0.050* (0.025)	-0.049* (0.024)	-0.050* (0.025)
Level of executive constraints <sub>t-1</sub>	0.028 (0.045)	0.041 (0.045)	0.046 (0.047)	0.047 (0.046)
De facto judicial independence <sub>t-1</sub>	0.292** (0.111)	0.298** (0.112)	0.296** (0.114)	0.293** (0.113)
Ratification of ICCPR <sub>t-1</sub>	-0.044 (0.149)	-0.068 (0.148)	-0.084 (0.148)	-0.081 (0.148)
Number of IGOS joined <sub>t-1</sub>	-0.000 (0.003)	-0.001 (0.004)	-0.001 (0.004)	-0.001 (0.004)
Log GDP per capita US \$ <sub>t-1</sub>	-0.367*** (0.066)	-0.371*** (0.065)	-0.372*** (0.068)	-0.374*** (0.065)
Trade % of GDP <sub>t-1</sub>	0.002 (0.002)	0.001 (0.002)	0.001 (0.002)	0.001 (0.002)
Total natural resources rents <sub>t-1</sub>	-0.009 (0.006)	-0.009 (0.006)	-0.009 (0.006)	-0.009 (0.007)
Log of population <sub>t-1</sub>	0.003 (0.053)	0.012 (0.053)	0.024 (0.056)	0.027 (0.054)
Political repression <sub>t-1</sub>	0.341*** (0.032)	0.341*** (0.032)	0.342*** (0.033)	0.342*** (0.033)
Constant	-0.818 (1.173)	-0.558 (1.188)	-0.470 (1.230)	-0.472 (1.200)
Observations	3,535	3,535	3,535	3,535

Robust standard errors in parentheses \*\*\* p<0.001, \*\* p<0.01, \* p<0.05