



WIDER Working Paper 2022/147

## **Hidden hostility: donor attention and political violence**

Siwan Anderson,<sup>1</sup> Patrick Francois,<sup>1</sup> Dominic Rohner,<sup>2</sup> and Rogerio Santarrosa<sup>3</sup>

December 2022

**Abstract:** Political violence is a worldwide problem that has been on the rise over the past decade. The international dimension of domestic repression and dissent is a particularly relevant factor yet surprisingly understudied. In particular, governments that heavily depend on foreign aid may crack down on political opponents when donors are distracted by major domestic events. In reaction, the opposition may have incentives to reduce agitations to incite such crackdowns. We study this interaction in a simple strategic model and empirically test the predictions using fine-grained data for Africa. The theory surmises that oppositions will reduce agitations when shocks are anticipated (elections). In contrast, when unanticipated shocks (natural disasters) hit, and when agitations are already underway, the theory surmises that the opposition will substitute visible forms of unrest (riots) for more covert operations on soft targets (civilian-targeted violence). This pattern is precisely reflected in the data. International inattention hurts political oppositions through the out-of-equilibrium threat of increased repression, and observed political crackdowns may only represent the ‘tip of the iceberg’. Enhancing international scrutiny would help safeguard public demonstrations of dissent and reduce violence against civilians.

**Key words:** political violence, agitation, repression, riots, violence against civilians, natural disasters, elections, foreign aid

**JEL classification:** D74, F59, O19

**Acknowledgements:** We gratefully acknowledge support from the ‘Institutional legacies of violent conflict’ programme of UNU-WIDER. We are also grateful for helpful comments from Bruno Caprettini, James Fenske, Maria Petrova, Thorsten Rogall, Arthur Silve, and seminar and conference participants at Princeton, UBC, CERGE-EI, Paris School of Economics, University of Bern, UNU-WIDER workshop, CEPR annual summit, CEPR RPN on conflict conference in Lausanne, and the Political Economy of Power Relations conference in Bocconi.

---

<sup>1</sup> Vancouver School of Economics, Vancouver, British Columbia, Canada; <sup>2</sup> University of Lausanne, Lausanne, Switzerland, and CEPR, London, UK; <sup>3</sup> Institute of Education and Research (INSPER), Sao Paulo, Brazil; corresponding author: [dominic.rohner@unil.ch](mailto:dominic.rohner@unil.ch)

This study has been prepared within the UNU-WIDER project [Institutional legacies of violent conflict](#).

Copyright © UNU-WIDER 2022

UNU-WIDER employs a fair use policy for reasonable reproduction of UNU-WIDER copyrighted content—such as the reproduction of a table or a figure, and/or text not exceeding 400 words—with due acknowledgement of the original source, without requiring explicit permission from the copyright holder.

Information and requests: [publications@wider.unu.edu](mailto:publications@wider.unu.edu)

ISSN 1798-7237 ISBN 978-92-9267-280-5

<https://doi.org/10.35188/UNU-WIDER/2022/280-5>

Typescript prepared by Mary Boss.

United Nations University World Institute for Development Economics Research provides economic analysis and policy advice with the aim of promoting sustainable and equitable development. The Institute began operations in 1985 in Helsinki, Finland, as the first research and training centre of the United Nations University. Today it is a unique blend of think tank, research institute, and UN agency—providing a range of services from policy advice to governments as well as freely available original research.

The Institute is funded through income from an endowment fund with additional contributions to its work programme from Finland, Sweden, and the United Kingdom as well as earmarked contributions for specific projects from a variety of donors.

Katajanokanlaituri 6 B, 00160 Helsinki, Finland

The views expressed in this paper are those of the author(s), and do not necessarily reflect the views of the Institute or the United Nations University, nor the programme/project donors.

## 1 Introduction

In addition to the millions of fatalities and a worldwide economic recession, the tally of COVID-19's victims also includes freedom of expression and freedom of assembly in a long list of countries. For example, China has been accused of using the distraction of the pandemic to curtail democratic liberties in Hong Kong.<sup>1</sup> Though worldwide, images of violent protests and crackdown were relatively rare during the pandemic, and pro-democracy leaders tended to be as discreet as possible; according to Freedom House (Freedom House 2020), around the world democracy lost ground; during the pandemic, democracy receded in 80 countries and progressed in only one.

While accelerated during COVID-19, the demise of democracy has been a longer trend over the last 15 years (Freedom House 2021) and has been accompanied by a rise in political violence worldwide (UCDP 2022). Worryingly, even initially limited and localized incidences of conflict can give birth to major wars down the road (see the discussion in Rohner 2011). Perhaps surprisingly, there are still various major gaps in our understanding of political violence. One major understudied question is the international dimension of domestic repression and dissent.

In this paper we investigate this open question, studying general patterns beyond the COVID-19 pandemic. In particular, we are interested in the impact of international attention on the behaviour of governments and opposition groups in Africa—where the heavy dependence on foreign aid renders the attention of donor countries particularly salient to domestic political actors.<sup>2</sup> It is natural to surmise that donor governments may exert some leverage on recipient governments when they make large (relative to recipient budget) aid contributions. It is also likely that—at least in some contexts—donor countries and recipient governments may differ considerably in their desires to accommodate democratic forms of dissent. The scrutiny of donor countries may hence affect the scope for repression and violence against opposition protesters. Yet the degree to which donor countries will scrutinize the actions of recipient governments depends, at least in part, on the amount of attention that the public in donor countries pays to recipient country domestic events.

In recipient countries with low state capacity (the case for many aid recipients), we expect the government to find it difficult to capitalize on donor inattention and launch (unprepared) military operations against hard military opposition targets. However, the government may react more harshly and violently against easily reachable soft targets or in response to provocations from opposition forces. This could take the form of beating up protesters, shooting into crowds, or rounding up organizers. In reaction, one expects the opposition to factor in that the government has 'freed hands' and moderate their own anti-government agitation. This could, in equilibrium and under certain conditions, even result in overall declines in government repression.

To help clarify the effects that donor scrutiny might have on government repression and opposition moderation, we first build a formal model. The model focuses on how strategic conflict behaviour changes when donor scrutiny is temporarily diverted. It delivers testable predictions on how inattention affects the scope for different types of conflict. A key role is played by whether donor inattention is

---

<sup>1</sup> See, e.g., Washington Post, 2020, <https://www.washingtonpost.com/opinions/2020/05/21/china-is-using-covid-19-throttle-hong-kongs-pro-democracy-movement/>; The Guardian, 2020, <https://www.theguardian.com/world/2020/apr/20/hong-kong-using-covid-19-crisis-as-golden-opportunity-for-crackdown-says-arrested-leader>; New York Times, 2020, <https://www.nytimes.com/2020/04/21/world/asia/coronavirus-hong-kong-protests.html>.

<sup>2</sup> In 2019, the annual amount of state donor aid counted as Official Development Assistance (ODA) sometimes exceeded half of government budgets in Africa (see <https://data.worldbank.org/indicator/DT.ODA.ODAT.XP.ZS>). It was especially large from the main donor countries UK, France, US, Japan, and Germany. There are also a substantial amount of military transactions building bilateral links between countries (Fearon and Hansen 2018).

anticipated or unanticipated and whether at the moment of diversion agitation was already under way or not.

In particular, the model delivers the prediction that, in the absence of agitation, inattention should result in a down-scaling of all types of opposition action. In contrast, when agitation had already been under way, cancelling all agitation is difficult in the short run, and we find that in this case one should expect greater polarization in actions—away from ‘intermediate’ forms of violence (demonstrations) towards both greater caution for part of the population (staying home) as well as more extreme violence (targeted killings) committed by other parts of the opposition. While anticipated shocks (elections) will discourage agitation, unanticipated shocks (disasters) can hit both in periods of agitation being present or absent.

In a second step, we perform an empirical investigation. Attention is likely to be affected by the occurrence of major newsworthy events at home, and it is the quasi-random timing of these events that we exploit here to explore the impact of donor country attention on recipient countries. Specifically, we conjecture that when donors are distracted (e.g., by natural disasters or elections at home), recipient governments will be less constrained in undertaking unpopular (to donors) domestic repressive acts.

For the empirical investigation, we assemble a new data set covering all African countries for the period 1990–2018. For each country in our data set, we build a network of key foreign partners (i.e. major donors or military partners) and construct a fine-grained high-frequency measure of unanticipated (natural disasters) and anticipated (elections) shocks to which these key partners are exposed. It is studied how these shocks to donor countries affect various types of political violence in recipient countries.

We find that in moments of ‘inattention’ precipitated by these (donor country) shocks, domestic (recipient country) ‘demonstrations’ (protests and riots) are reduced significantly. In line with the model, this pattern is present in all scenarios (with the drop in demonstrations being either due to all agitation being put on hold or due to re-shuffling of political opposition action towards polarized outcomes. Further, as predicted by the model, for anticipated shocks (elections), extreme forms of revolt (targeted killings) decline (as all agitation is cancelled), while for unanticipated shocks the surge in polarization of modes of revolt leads to a greater risk of targeted killings perpetuated by the opposition.

An important implication of our findings is that international inattention may hurt political oppositions beyond observed repression—which only represents the ‘tip of the iceberg’. In fact, the out-of-equilibrium threat of crackdowns weakens the peaceful opposition to bad regimes and can fuel radicalization. Guaranteeing constant international scrutiny is key, as it helps to safeguard public demonstrations of dissent and reduce violence against civilians, such as targeted killings.

The current work is related to the literature on the impact of information, scrutiny, and public attention on policy choices of politicians (Besley and Burgess 2002; Strömberg 2004; Eisensee and Strömberg 2007; Djourelouva and Durante 2019).<sup>3</sup> Of particular relevance is the small literature linking public inattention to military attacks. While there is ample qualitative work providing case study evidence that public scrutiny constrains foreign policy (Mueller 1973; Sobel 2001; Baum 2004; Canes-Wrone 2010), econometric studies are very rare. One exception is the study by Durante and Zhuravskaya (2018), who find that Israeli military attacks on Palestinian targets are significantly more likely to occur during major (anticipated) political/sport events dominating US news, while they are unrelated to the (non-anticipated) onset of natural disasters.

---

<sup>3</sup> Other relevant literatures are the ones on drivers of protests (Kricheli, Livne, and Magaloni 2011; Barbera and Jackson 2016; Passarelli and Tabellini 2017; Battaglini, Morton, and Patacchini 2020), economics of conflict (Rohner and Thoenig 2021; Anderton and Brauer 2021; Rohner 2022), and impact of foreign aid (Collier and Hoeffler 2002; Easterly 2003; Sachs 2006; De Ree and Nillesen 2009; Nunn and Qian 2014).

While their pioneering contribution is extremely valuable in showing with concrete data that donor scrutiny affects recipient actions in Israel, their findings may be difficult to generalize to different contexts. Israel is an ‘outlier’ among aid recipients, given its unique geopolitical situation, its mature democratic political institutions, its extensive state and military capacity, and its advanced level of economic development.<sup>4</sup> The context is extremely different for many aid recipients around the world, and particularly so in aid-dependent African countries. They tend to have lower state capacity, experience state conflicts with a larger number of actors, and have military targets that are harder to identify. Democracy levels also vary widely across the continent, and African states typically rely on multiple aid donors, with foreign aid amounting to a much larger share of the overall budget.

In contrast to the existing work, our focus is on: (i) the impact of donor attention on protests and repression for a whole continent of aid recipients (Africa), (ii) the link between inattention and the behaviour of citizens (potential protesters) rather than on politicians,<sup>5</sup> and (iii) a formal model that, in our case, is helpful for making clear the sometimes subtle implications of donor inattention effects.

The paper is organized as follows. Prior to turning to the central analysis, the next section briefly considers suggestive evidence that the mechanism we explore here is relevant. Section 3 introduces the theoretical model and discusses its implications. The data used to test the model’s predictions are described in Section 4, and the estimation strategy is laid out in Section 5. Our main estimation results are presented in Section 6 and then our paper concludes in Section 7.

## 2 Illustrating media attention and distraction

### 2.1 Are citizens of donor countries distracted when major domestic news occur?

The claim here is that donor inattention affects political activities in African recipient countries. As discussed earlier, a motivation for this study was Durante and Zhuravskaya (2018). A significant detail of their work was their ability to identify media coverage as the channel via which donor distraction could be measured. US elections and the Superbowl, for example, were events of high viewer interest on cable news. These received disproportionate airtime, leaving less media attention to be directed to any events that may occur in Israel.

That type of inquiry was feasible in their context because they essentially studied a bilateral pair—the United States and Israel—and hence were able to focus on a small number of media outlets (US cable news). Our focus, with multiple donors and multiple recipient countries, makes a direct replication of that method beyond our scope here. Our empirical focus will instead be on the relationship between donor distraction events and political activities in recipients without a direct scrutiny of fluctuations in media coverage that links these events.

Even in such a sample, some indication can be obtained by considering citizen distraction in donor countries via other media. To this end, Google searches are useful, since these are timed by the day, are place-specific, and can be synchronized with significant donor events. If the mechanism is of some relevance here, we should at least expect some indication of this via reduced searches of recipient countries

---

<sup>4</sup> It is also characterized by a particularly strong bond with the United States: it is among the top two aid recipients from the United States, with most of the aid being linked to the military (US\$3.8 billion in 2020). Yet aid represents a relatively small part of the budget (US\$134 billion).

<sup>5</sup> To be clear, Durante and Zhuravskaya (2018) also studied Palestinian-initiated agitations and found no effects on these under US inattention. Here we suspect that the differences in state capacity between the African sample and Israel are the reason for why we find such pronounced effects on the opposition side.

from searchers in donor countries, when donor countries are experiencing significant domestic events (such as natural disasters and elections). The panels of Figure 1 display some motivating evidence along these lines. We focus on the main donor (defined formally below) for a recipient-donor pair in the panels of the figure. The duration of events lasting more than one day is represented in yellow. We focus on the search terms ‘recipient country name’ (e.g., Egypt) and the ‘donor country name’ (e.g., United States) for Google searches taking place in that particular donor country.

Figure 1: Distraction by domestic events (elections/disasters)



Source: Google trends.

In all panels, the onset of significant donor events correspond with dips in searches of particular African donor countries. Of course, this is not a direct test of the mechanism, but it does point to some potential relevance. We explore a more specific empirical investigation after a formal model and its predictions are developed in Section 3.

## 2.2 Are citizens in recipient countries following the news taking place in donor countries?

Another reality check of our framework concerns the information set of the opposition in the recipient countries. As sketched above, we assume that the opposition is able to observe when their home government is distracted by major international news. If this is the case, we should expect Google search patterns to reflect media attention in recipient countries for events (elections/disasters) taking place in donor countries. For example, when there are French elections, more people in Senegal are expected to Google the term ‘French’. As illustrated by Figure 2, this assumption is not far-fetched. In the examples of the four panels, we see that major international news are picked up in recipient countries.

Figure 2: Distraction by domestic events (elections/disasters)



Source: Google trends.

### 3 The model

Each period, leaders of the opposition may have the opportunity to instigate protests against the government. With probability  $\rho < 1$ , the opportunity arises in period  $t$  because the government has acted in ways to anger the population or is perceived to have done so, or because of some other such factor, external to the model. With probability  $1 - \rho$ , no opportunity arises.<sup>6</sup>

#### 3.1 Opposition leader choice

If the opportunity presents itself in period  $t$ , then opposition leaders choose either  $D_t = 1$  to avail themselves and foment dissent starting in  $t$  or  $D_t = 0$  to ignore the opportunity. If dissent is started in  $t$ , it is common knowledge that it will last for  $n \geq 1$  periods.

Opposition leaders are a single entity choosing based on expected costs and benefits. Denote the cost to the leaders of fomenting dissent by the random variable  $k_t$ , where  $k_t$  is drawn from some stationary distribution and  $g(k)$  on support  $[0, \infty)$ , of which the properties are unimportant. No costs are born if  $D_t = 0$ , and costs are  $k_t$  if  $D_t = 1$ .

The opposition leader's benefit to fomenting dissent,  $B_t$ , depends on the extent of uptake from the general population. When  $D = 0$ ,  $B_t = 0$ . When  $D = 1$ ,  $B_t = \sum_{\tau=t}^{\tau=t+n} B(M_\tau)$ , where  $M_\tau$  is the total mass of private individuals partaking in some form of dissent in period  $\tau$  and  $B$  is a monotonically increasing function.

<sup>6</sup> For example, there may have been heavy-handed violence by the police, overt corruption or favouritism, or past instances of such that have come to light. Such events act as lightning rods, allowing opposition leaders to organize civil actions amongst opponents of the government in response. While incompetent or corrupt governments offer more reasons for grievances, the exact timing of scandals erupting is hard to predict and can be seen as an exogenous shock.

## 3.2 Citizen choices

If dissent is fomented by leaders, individual citizens choose how, if at all, to participate. We model those decisions similar to Cantoni, Yang, Yuchtman, and Zhang (2019). Individuals are ordered by  $\theta$  along a continuum representing their willingness to act. At one extreme are people who are government supporters, with negative values of  $\theta$ . At the other, individuals with high  $\theta$  values are strongly opposed to the government and strongly motivated to take actions against it. Assume that  $\theta$  is distributed across the population by the density function  $f(\theta) \rightarrow (-\infty, +\infty)$  with full support.<sup>7</sup>

There are three actions available to individuals when leaders have fomented dissent ( $D = 1$ ). They can partake in one of: protests, riots, or violence against civilians. We normalize the utility gain to non-participation in any action to zero.

### *Protests*

The mildest form of dissent is protests, denoted as  $p$ . Peaceful public gatherings called protests in SCAD are defined: ‘Distinct, continuous, and largely peaceful action directed toward members of a distinct “other” group or government authorities’. Let  $V_p(\theta)$  represent the individual value to protesting, and it is monotonic in  $\theta$ :  $\partial V_p / \partial \theta > 0$ . The more disgruntled, the more one’s intrinsic utility to taking to the streets to peacefully express it.

The expected cost to an individual of protesting depends only on the state of government repression at time  $t$ ,  $S_t$ . There are two states of government repression: regular,  $S_t = R$ , and high,  $S_t = H$ . Under high repression, the expected cost of taking part in a protest is given by  $C_p(H)$ , which is strictly greater than that under regular repression:  $C_p(H) > C_p(R)$ .<sup>8</sup>

### *Riots*

A more intense expression of dissent is to riot,  $r$ . Riots, as defined by SCAD are: ‘Distinct, continuous and violent action directed toward members of a distinct “other” group or government authorities. The participants intend to cause physical injury and/or property damage’. The value to an individual of rioting,  $V_r(\theta)$ , is again monotonic in  $\theta$ :  $\partial V_r / \partial \theta > 0$ . The expected cost of rioting also depends on the state of government repression,  $S$ , again with  $C_r(H) > C_r(R)$ .

### *Violence against civilians*

The most intense form of dissent constitutes an even more violent set of actions aimed directly at civilian supporters of the government. This involves seeking out and targeting government supporters with the intent of hurting or killing them and is termed ‘Violence Against Civilians’ (VAC). The value of this to the perpetrator is denoted as  $V_v(\theta)$  and again is enjoyed more by the more extreme supporters:  $\partial V_v / \partial \theta > 0$ . VAC can be done privately and opportunistically when a target can be found and is vulnerable.

---

<sup>7</sup> In reality, this single dimension summarizes at least two separate impulses. One is the extent to which an individual is aggrieved, and the other is the degree to which an aggrieved individual is willing to take (possibly violent) actions. A high value of  $\theta$  corresponds to an individual with both strong personal grievances and a high propensity to act violently. A low or negative value corresponds to someone who is a government supporter. A medium value could be someone who is strongly aggrieved by the government but unwilling, or unable, to take to the streets or to partake in violence. Alternatively, a medium value may correspond to someone who is only mildly aggrieved but is inherently disposed to take on violent acts when aggrieved.

<sup>8</sup> We could model these costs in more detail as the product of the probability of being detected by the authorities for taking part in an action and the punishment if caught, i.e. as:  $C_p(H) \equiv \pi_p(H)P_p(H)$ . The substantive assumption here is simply due to either one or both of these factors being greater with a more repressive government, i.e.  $C_p(H) > C_p(R) \equiv \pi_p(R)P_p(R)$ .



Since the aim is to kill or hurt civilians, the penalties for being caught in VAC are uniformly high. Distinct from protests and riots, the costs of undertaking VAC do not vary. That is,  $C_v(H) = C_v(R)$ . Protests and riots are cracked down on more frequently and violently in states of high repression.<sup>9</sup> But the punishment if caught committing VAC is high independent of the government's state of repression.

We order valuations across activities; that is, high  $\theta$  individuals value more violent forms of dissent relatively more. So we assume that  $\partial V_p/\partial\theta < \partial V_r/\partial\theta < \partial V_v/\partial\theta$ . The net value of undertaking a dissenting action  $d = p, r, v$  is given by:

$$U_d(\theta) \equiv V_d(\theta) - C_d(S), \quad (1)$$

with  $S = R$  or  $H$ .

When leaders have not fomented dissent, i.e. when  $D = 0$ , there is no value to private individuals from partaking in any form of dissent. When  $D = 1$ , the individuals' utility from partaking is as above.

### *Optimal opposition choice*

Each period, with probability  $1 - \rho$  there is no possibility of dissent and no choice for the opposition leaders to make. With remaining probability  $\rho$ , the opportunity to foment dissent avails itself, and opposition leaders observe the period  $t$  costs of dissent,  $k_t$ .

If they choose no dissent ( $D_t = 0$ ), their utility is 0. If they choose to initiate dissent ( $D_t = 1$ ), then the benefits are  $B_t \equiv \sum_{\tau=t}^{\tau=t+n} B(M_\tau)$ , recalling that  $M_\tau$  is the total mass of private individuals partaking in some form of dissent in period  $\tau$ . Since the individual benefits to participating in dissent are monotonic in  $\theta$  and the support,  $f(\theta)$ , is unbounded, there will in any period  $t$  in which dissent is fomented exist some  $\theta_t$  (this will be shown subsequently) such that all individuals for whom  $\theta \geq \theta_t$  participate and  $\theta < \theta_t$  stay home. Then, necessarily,  $B_t$  is monotonically decreasing in that  $\theta_t$ .

Given this, the decision rule for opposition leaders is simple:

$$D_t = 1 \text{ iff } B_t \equiv \sum_{\tau=t}^{\tau=t+n} B(\theta_\tau) \geq k_t. \quad (2)$$

The choice to foment dissent is thus a straightforward trade-off between costs, as captured by  $k_t$  drawn from  $g(k)$  each period, and expected benefits, which depend on the degree to which citizens will respond to a call for action. It is thus possible to define a cut-off level of costs,  $k_t^*$ , below which dissent will be chosen in  $t$  and above which it will not.  $k_t^*$  will, of course, vary depending on the degree to which citizens will participate, which we shall now consider.

### *Optimal citizen choices*

The optimal choice for citizen  $\theta$  is to participate in at least one form of dissent if and only if:

$$\max_{d=p,r,v} U_d(\theta) > 0, \quad (3)$$

where  $U_d$  is defined in (1). And to stay home otherwise.

## 3.3 Analysis

Since  $C_d$ , where  $d = r, p$ , or  $v$ , is independent of  $\theta$ ; since  $\partial V_d/\partial\theta$ , where  $d = r, p$ , or  $v$  is increasing in  $\theta$ ; and since  $f(\theta)$  is continuous and  $\theta$  has full support, there exists a unique value of  $\theta$  at which  $U_p(\theta) = 0$ ,

---

<sup>9</sup> Greater security force presence on the streets, more violence if caught by security forces, shooting into protesters or rioters, etc.

a unique value of  $\theta$  at which  $U_r(\theta) = 0$ , and a unique value of  $\theta$  at which  $U_v(\theta) = 0$ . Denote these  $\theta_p^0$ ,  $\theta_r^0$ , and  $\theta_v^0$ , respectively. Such points exist irrespective of whether  $S = H$  or  $R$ .

The assumptions so far ensure that there always exist sufficiently high values of  $\theta$  so that some individuals will choose VAC when  $D_t = 1$ , irrespective of whether  $S_t = R$  or  $H$ . In order to rule out the uninteresting case where either protests or riots are always dominated for all individuals, we make the following assumption:

### Assumption non-empty

When  $S = R$ :

$$(i) U_p(\theta_p^0) > \max\{U_r(\theta_p^0), U_v(\theta_p^0)\}.$$

$$(ii) \text{ At value } \theta_{pv} \text{ defined as } \theta \text{ such that } U_p(\theta_{pv}) = U_v(\theta_{pv}), U_r(\theta_{pv}) > U_v(\theta_{pv}).$$

This implies the following partition of the  $\theta$  space in terms of agents' chosen actions of dissent.

**Proposition 1** *When  $D = 1$  and  $S = R$ , there exists a level of  $\theta$ , denoted as  $\theta^p$  and defined by:*

$$U_p(\theta^p) = 0, \tag{4}$$

*such that any individual with  $\theta < \theta^p$  undertakes no dissent. There exists a level of  $\theta$ , denoted as  $\theta^r > \theta^p$  and defined by:*

$$U_p(\theta^r) = U_r(\theta^r), \tag{5}$$

*such that any individual with  $\theta \in [\theta^p, \theta^r)$  protests. There exists a level of  $\theta$ , denoted as  $\theta^v > \theta^r$  and defined by:*

$$U_r(\theta^v) = U_v(\theta^v), \tag{6}$$

*such that any individual with  $\theta \in [\theta^r, \theta^v)$  riots. Any individual for whom  $\theta \geq \theta^v$  undertakes VAC.*

**Proof:** The point defined as  $\theta^p$  in the statement is equivalent to  $\theta_p^0$ , which thus always exists. For  $\theta < \theta^p$ , any action of dissent yields negative utility, so no actions are taken. From part (i) of assumption *non-empty*, at  $\theta^p$  protests are preferred to both riots and VAC. By continuity, there exists  $\theta > \theta^p$  where protests are preferred to non-action as well.

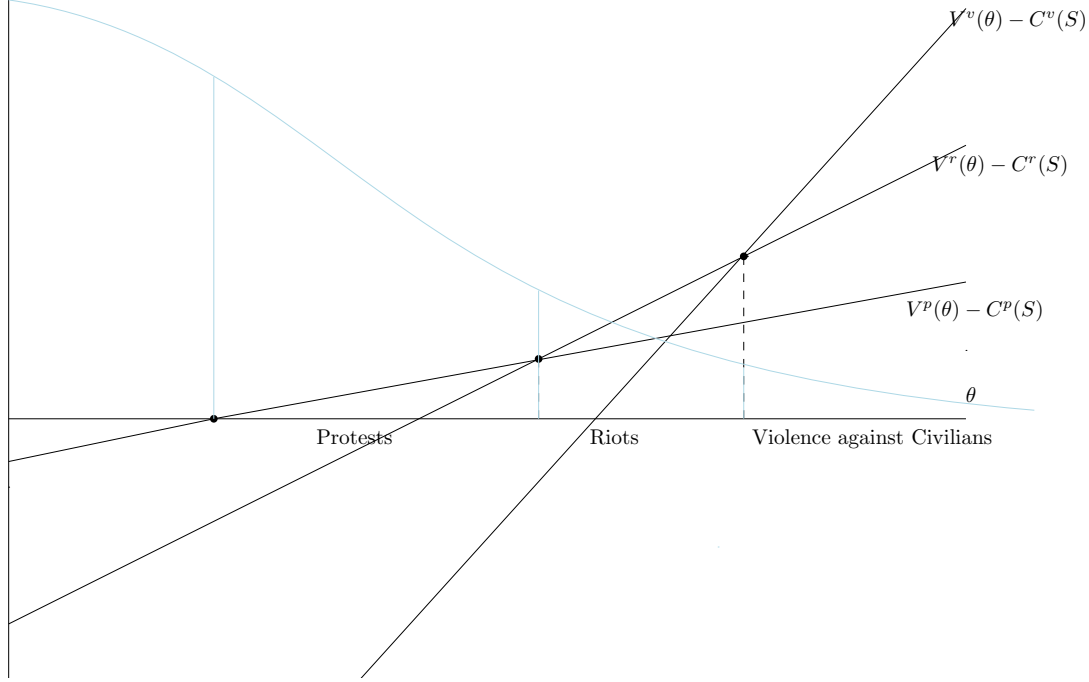
Since  $V_r' > V_p'$  for all  $\theta$ ,  $V_r > V_p \forall \theta > \theta^p$ . And there exists a unique  $\theta$  at which  $U_r = U_v$ , defined as  $\theta^v$  in the statement. At  $\theta^v$ , it follows from part (ii) of assumption *non-empty* that, necessarily,  $U_r > U_p$  as well, and by continuity this is true for  $\theta \rightarrow \theta^v$ .

Finally, for  $\theta > \theta^v$ , since  $V_v' > V_r'$ , it follows that  $V_v > V_r > 0$  and all such individuals choose VAC.

*QED*

Figure 3 illustrates the cut-offs as the points where the  $U_d$  schedules intersect in  $\theta$  space and depicts the  $\theta$  regions corresponding to the differing types of dissent. The blue line is an example of the density,  $f(\theta)$ .

Figure 3: Distribution of types of dissent



Source: authors' calculations.

A state of heightened government repression,  $S = H$ , increases the costs to individuals from rioting and protesting. This has the following overall effect.

**Proposition 2** Under  $D = 1$  and  $S = H$ , let the relevant cutoffs be denoted as  $\theta^p(H)$ ,  $\theta^r(H)$ , and  $\theta^v(H)$ . We then have:  $\theta^p(H) > \theta^p$  and  $\theta^v(H) < \theta^v$ . These imply that when dissent occurs ( $D = 1$ ) during a state of high government repression ( $S = H$ ):

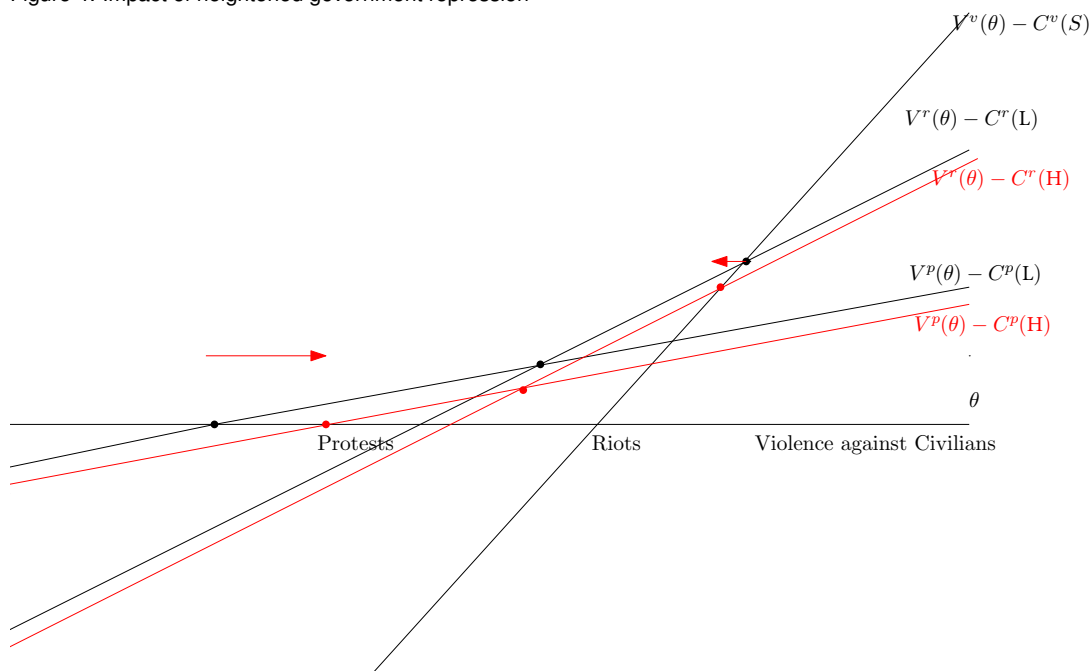
- (i) The frequency of non-dissent increases.
- (ii) At least one of protesting or rioting falls.
- (iii) Violence against civilians rises.

Proof: Given that  $C_p(H) > C_p(R)$ , then  $U_p H < U_p R$ , and since  $C_r(H) > C_r(R)$ ,  $U_r H < U_r R$  for all  $\theta$ . However,  $U_v H = U_v R$ . Since  $U_p H < U_p R$ , it is immediate that  $\theta^p(H) > \theta^p$ , and this implies statement (i). Since  $U_r H < U_r R$  and  $U_v$  is unchanged, then necessarily  $\theta^v(H) < \theta^v$ , and this implies statement (iii). Statements (i) and (iii) imply statement (ii).

*QED*

Under a more repressive government, the costs of undertaking a public protest are higher, so fewer individuals choose to express dissent. Some prospective rioters will seek to avoid the increased repression occurring in the streets and will instead directly target civilians who are supporters of the government. Both of these effects imply that the total number of rioters and protesters must fall. However, since there is also substitution between rioting and protesting, depending on how increased repression affects the relative costs of the two, it is not immediately clear whether a particular one of these falls under repression. The frequency of violence against civilians unambiguously increases since violently inclined protesters shift away from public actions of dissent that have become relatively costly towards private ones directly targeting vulnerable government supporters.

Figure 4: Impact of heightened government repression



Source: authors' calculations.

Figure 4 illustrates how the regions of dissent are altered under heightened government repression. The red lines indicate a heightened state of repression.

An implication is that a dissent already underway will be affected as indicated in the statement of the proposition by the government moving into a state of high repression. Namely, conditional upon a dissent being in progress, increasing government repression leads to less overall participation in public dissent (a decline in protests, riots, or both) but an increase in violence against civilians.

The proposition implies that dissent instigated by opposition leaders is less effective when the government is in a highly repressive state. Given this, when faced with the choice of initiating dissent, opposition leaders will choose dissent less frequently. That is:

**Proposition 3** *If, at time  $t$ , the opportunity for dissent arises, opposition leaders are strictly less likely to do so when  $S = H$  than when  $S = R$ . That is,  $k_t^*$  is strictly lower when  $S_t = H$  than when  $S_t = R$ .*

Proposition 3 implies that under high government repression, the opposition will take the opportunity to start dissent less frequently, and proposition 2 implies that any dissent that is incited in that state will instigate less public participation. The propositions together imply that any period of high government repression should be accompanied by less overall dissent; total protests (both peaceful and riots) should occur less frequently.

However, there are countervailing effects on violence against civilians. On one hand, since dissent starts less often, there will be less VAC. On the other, when dissent occurs under  $S = H$ , some citizens substitute away from rioting towards VAC. The overall effect on VAC of  $S = H$  is ambiguous. Yet, conditional upon an interval of dissent already having started, if  $S$  changes from  $R$  to  $H$ , the model predicts VAC to unambiguously rise.

### 3.4 Empirical implications

The key to exploring the model's empirical implications lies in identifying periods of regular versus high government repression. As discussed previously, to do this, we utilize information on periods when donor countries are distracted. There are two types of situations we can identify. The first is natural disasters that occur in the donor country. The second is general elections. Both of these, when they occur, occupy an enormous amount of attention in donor countries, allowing recipient governments a relatively free reign.

We treat these as shocks: one set unanticipated (natural disasters) and the other anticipated (elections). There is a difference in the effects of the two shocks. If an opportunity arises for the opposition leaders to start an agitation at time  $t$  that will last for  $n$  periods, they do not know whether a disaster will arrive within the next  $n$  periods. Since the disaster increases repression and lowers public participation in the agitation, it may have affected their choice to instigate if it had been known. In contrast, elections arrive at a predetermined time. There will be 'unused windows of opportunities' (i.e. feasible agitations not instigated by leaders) close to an election that would have been undertaken otherwise (i.e. in the absence of election). This difference between the two types of shocks leads to differing predictions about the forms of dissent that will accompany them.

Some periods of dissent would not have been chosen had the opposition leaders known in advance that a disaster was about to occur. However, this is not the case for elections that are known in advance to occur at specified times. An implication of this is that the dissent-suppressing effect of elections is greater than that of natural disasters.

The conditional results (i.e. the estimates conditional on dissent being already underway), however, are the same for both disasters and elections. Both predict negative effects for riots and protests in total, but a substitution from riots to VAC has positive effects on VAC.

To summarize, we have four main sets of predictions that we shall test with our data:

**Prediction 1:** (Unconditionally) Natural disasters: (a) lower the overall frequency of demonstrations, (b) lower the frequency of at least one of protests and riots, and (c) have ambiguous effects on violence against civilians.

**Prediction 2:** Conditional upon an agitation already being underway, natural disasters: (a) lower the overall frequency of demonstrations, (b) lower the frequency of at least one of protests and riots, and (c) increase violence against civilians.

**Prediction 3:** (Unconditionally) Elections: (a) lower the overall frequency of demonstrations, (b) lower the frequency of at least one of protests and riots, and (c) have ambiguous effects on violence against civilians. The coefficient for violence against civilians is expected to be more negative than for natural disasters (as incentives for starting agitation are on average smaller before elections).

**Prediction 4:** Conditional upon an agitation already being underway, elections: (a) lower the overall frequency of demonstrations, (b) lower the frequency of at least one of protests and riots, and (c) increase violence against civilians.

Before explaining our empirical strategy for testing these four predictions, we briefly describe our data sources.

## 4 Data

We draw on three main data sets for our core empirical analysis, which we describe below. We also explain how some additional data are used for robustness checks.

For our measure of natural disasters, we rely on the **EM-DAT International Disaster Database** created by the Centre for Research on the Epidemiology of Disasters (CRED) at the School of Public Health of the Université Catholique de Louvain (Belgium).<sup>10</sup> This global data set focuses on natural and technological disasters, drawing on a variety of sources, primarily from international agencies (e.g., the UN, Red Cross, national governments). It contains more than 21,000 disasters from 1900 to the present. We focus on natural disasters and only those with 115 or more people dead. This restricts the analysis to the top 10 per cent of natural disasters in terms of severity of fatalities.

To identify recipient and donor country pairs, we rely on the **OECD International Development Statistics**.<sup>11</sup> We focus on the total net donor-recipient-year flow, which includes 49 donors and about 180 recipients over the period 1960 to 2017. In a set of robustness checks, we also consider countries linked by military transactions. For this information, we use a data set from Fearon and Hansen (2018) that draws on information from the Stockholm International Peace Research Institute (SIPRI) on arms transfers between states since 1950.

Our core measures of political violence come from the **Armed Conflict Location and Event Data Project (ACLED)**, which is derived from a wide range of local, regional, and national sources that are collected by trained data experts worldwide.<sup>12</sup> It contains geographical (GPS) and time (day) precision for a large set of conflict events throughout Africa (and beyond) over the period 1997 to the present. For our purposes, ACLED tracks political violence, demonstrations, and select (politically important) non-violent events. The types of events include battles, explosions/remote violence, violence against civilians, protests, riots, and strategic development. In terms of actors, there are state forces, rebels, militias, identity groups, demonstrators, civilians, and external forces. The key outcomes we focus on are defined as follows: *Violence against civilians*: violent events where an organized armed group deliberately inflicts violence upon unarmed non-combatants (e.g., beating, shooting, torture, rape, mutilation, kidnapping). *Protests*: public demonstration in which the participants do not engage in violence, though violence may be used against them. *Riots*: violent events where demonstrators or mobs engage in disruptive acts, including but not limited to rock throwing and property destruction.

For a set of robustness checks, we also use measures of political violence from the Social Conflict Analysis Database (SCAD).<sup>13</sup> This alternative conflict data source contains information on protests, riots, strikes, and other social disturbances. It contains geographical (GPS) and time (day) precision on a large set of conflict events throughout Africa and Latin America over the period 1990 to 2017. It is based on searches of Associated Press and Agence France Presse news wires, as compiled by the Lexis-Nexis news service. The events we focus on include peaceful demonstrations, violent riots, strikes, repression, anti-government violence, extra-government violence, and intra-government violence.

For the national elections data, we put this together ourselves for all donor countries.<sup>14</sup>

---

<sup>10</sup> See <https://www.emdat.be/>.

<sup>11</sup> See <https://www.oecd.org/dac/financing-sustainable-development/development-finance-data/idsonline.htm>.

<sup>12</sup> See <https://acleddata.com/>.

<sup>13</sup> See <https://korbel.du.edu/sie/research/data-downloads>.

<sup>14</sup> In particular, we have collected information on key national elections for the main donors (United States, United Kingdom, France, Germany, and Japan) since 1989. We have focused on the elections that were decisive on the identity of the head of the

Assembling together these data, we created a data set spanning the period 1997–2018 for Africa. Our unit of analysis is at the country (recipient) day level. The conflict outcome is a dummy variable indicating whether there was a conflict event on that day (e.g., repression, demonstration).

## 5 Empirical strategy

We construct the bilateral link between donor country  $d$  and recipient country  $r$  in a given year  $y$  as follows:

$$Link_{r dy} = \frac{\sum_{\tau=y-10}^{\tau=y} ODA_{rd\tau}}{\sum_d \sum_{\tau=y-10}^{\tau=y} ODA_{rd\tau}}, \quad (7)$$

For a given bilateral pair, this link corresponds to the share of total transfers, from a particular donor country  $d$  with respect to all transfers,  $ODA$ , received by a recipient within the 10 years preceding a given year  $y$ . Intuitively, this basically captures the relative importance of a given donor country. If, say, Senegal were to receive three-quarters of its ODA from France, this number would become 0.75.

We construct a donor specific disaster variable using this link for a given day, denoted by  $t$ . We focus on the impacts of disasters the day before,  $t-1$ . This key explanatory variable is defined as follows:

$$\text{Donor Disaster}_{r,y,t-1} = \sum_d \text{Disaster}_{dt-1} \times Link_{r dy} \times ODA/GNI_{ry}, \quad (8)$$

where  $ODA/GNI$  is equal to share of the gross national income that stems from Overseas Development Assistance.

The main regression specification, which estimates the effects of unanticipated natural disaster shocks in donor countries on political violence, is defined as follows:

$$Y_{r,y,t} = \beta \text{Donor Disaster}_{r,y,t-1} + \gamma_{ry} + \alpha_m + \epsilon_{r,y,t}, \quad (9)$$

where  $Y_{r,y,t}$  represents our outcome variables of interest pertaining to incidences of various forms of political violence in recipient country  $r$ , in year  $y$ , and on day  $t$ . Our baseline specification, as described above, includes recipient country-year fixed effects,  $\gamma_{ry}$ , as well as month fixed effects,  $\alpha_m$ . The standard errors are clustered at the country level.

Our second main regression specification instead estimates the effects of anticipated elections in donor countries:

$$Y_{r,y,t} = \beta \text{Donor Election}_{r,y,t} + \gamma_{ry} + \alpha_m + \epsilon_{r,y,t}, \quad (10)$$

---

government (i.e. presidential elections in the United States and France, Bundestag elections in Germany, and general elections in the UK and Japan). The data stem from Encyclopedia Britannica, CNN, France24, Die Welt, and BBC.

where  $DonorElection_{r,y,t}$  is defined analogously to  $DonorDisaster_{r,y,t-1}$  in equation (11) for period  $t$ , so that:<sup>15</sup>

$$Donor\ Election_{r,y,t} = \sum_d Election_{dt} \times Link_{r,dy} \times ODA/GNI_{ry}, \quad (11)$$

In the estimation results presented below, we also consider a series of other specifications to address issues of seasonality concerns. A core threat to our identification strategy could be that seasonality is co-determining both disasters and political violence in the respective donor and recipient countries. Our main specification, as described above, includes month fixed effects to alleviate these concerns. We further report results from empirical specifications with recipient country-year-quarter fixed effects, recipient country-year-month fixed effects, average monthly temperature measures in the recipient country, average monthly precipitation measures in the recipient country, growing season controls in the recipient country (defined as the proportion of land that is in the growing season for each month), and a recipient country-specific (within-year) cubic time trend.<sup>16</sup>

## 6 Estimation results

In this section, we test our main empirical predictions 1 to 4 with the data and empirical strategy described above. Before turning to this, we first explore the effects of our key explanatory variables of interest,  $DonorDisaster_{r,y,t-1}$  and  $DonorElection_{r,y,t}$ , on direct measures of repression. We do this for two reasons. The first is to confirm our theoretically ambiguous prediction of two countervailing forces. In particular, as discussed above, the government has a greater tendency to repress when the world is not watching, yet the opposition is aware of that and moderates visible forms of demonstrations (riots/protests), which leads to an ambiguous overall effect on repression. The second is to compare our results directly to the work of Durante and Zhuravskaya (2018). In particular, given that the recipient countries we study have in many cases a lower military capacity than Israel, the ‘moderation of opposition’ effect should be stronger than in their case, resulting in a weakening of any impact of distraction on overall repression.

### 6.1 Repression

In the Israeli case studied by Durante and Zhuravskaya (2018), it was seen that the Israel Defense Forces (IDF) took advantage of donor distraction to undertake attacks against Palestinian targets. The evidence thus suggested that the IDF had the capacities to initiate military action. In the African context, however, as we have already noted, it is much more likely that the main choice for governments is to calibrate the extent of their response to opposition actions. As the theory makes clear, responses will tend to be more harsh when donors are distracted. But, on the other hand, anticipating this, opposition forces will be less likely to avail themselves of opportunities to agitate against the government.

We find that there are no significant effects of natural disasters on repression. This is in line with our theoretically ambiguous prediction of two countervailing forces.

---

<sup>15</sup> Note that since elections are anticipated, we expect that the media is ready to cover them as they happen, i.e. on the same day in period  $t$ . For unanticipated disasters, we instead expect that there is a delay and focus in on a media response a day later.

<sup>16</sup> Temperature and precipitation information come from the Climate Change Knowledge Portal of the World Bank (<https://climateknowledgeportal.worldbank.org/>). The growing season data come from PRIO-GRID (<https://grid.prio.org/>).

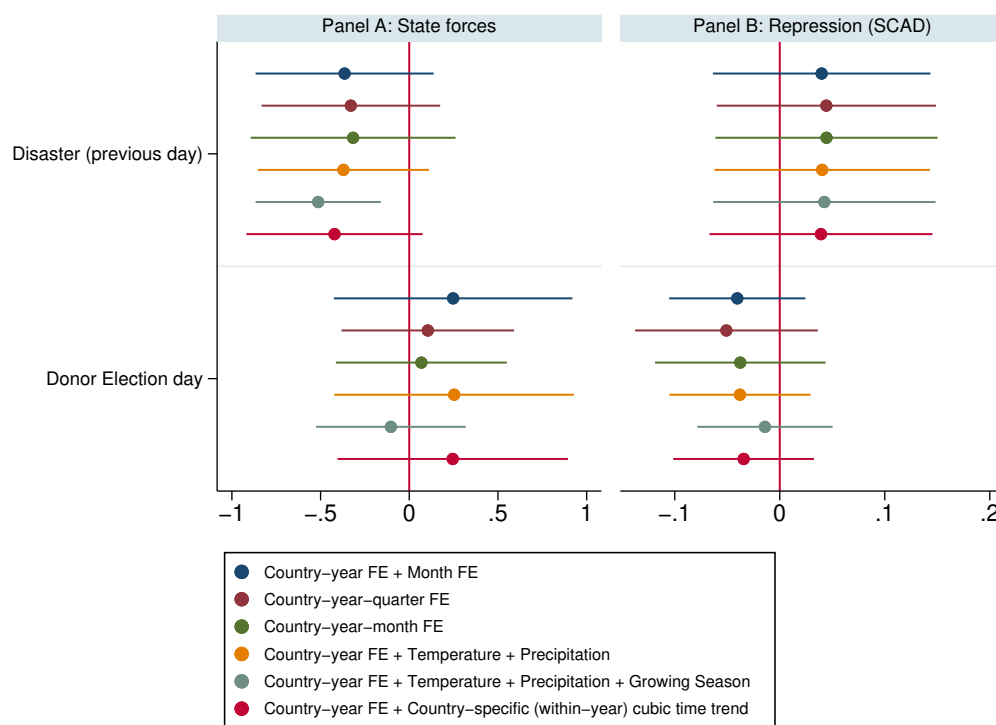


In particular, we estimate equations (9) and (10) for a series of outcome variables. Our main focus will lie on whether state forces were involved in any violent event (as defined by ACLED) and the incidence of repression by state forces (as defined by SCAD).

The results are displayed in Figure 5. The two panels A ('State violence') and B ('Repression (SCAD)') of this figure present plots of the estimated coefficients of  $\beta$  from equations (9) and (10).

Each panel contains the same specification variants, both for disasters and elections. The first estimate of  $\beta$  (in blue) in each figure is from our baseline specification, which includes recipient country-year fixed effects as well as month fixed effects. The subsequent five coefficient estimates are from specifications that include instead: (i) recipient country-year-quarter fixed effects (in red); (ii) recipient country-year-month fixed effects (in green); (iii) recipient country-year fixed effects plus temperature and precipitation controls (in yellow); (iv) recipient country-year fixed effects plus temperature and precipitation controls as well as growing season fixed effects (in grey); and (v) recipient country-year fixed effects plus a recipient country-specific (within-year) cubic time trend (in pink).

Figure 5: Impact of disasters and elections on state violence and repression



Source: see data description in Section 4.

We see throughout all specifications that neither  $DonorDisaster_{r,y,t-1}$  nor  $DonorElection_{r,y,t}$  are significant determinants of repression in nearly all of our empirical specifications, consistent with our model.

We now turn to testing our four main predictions of the model.

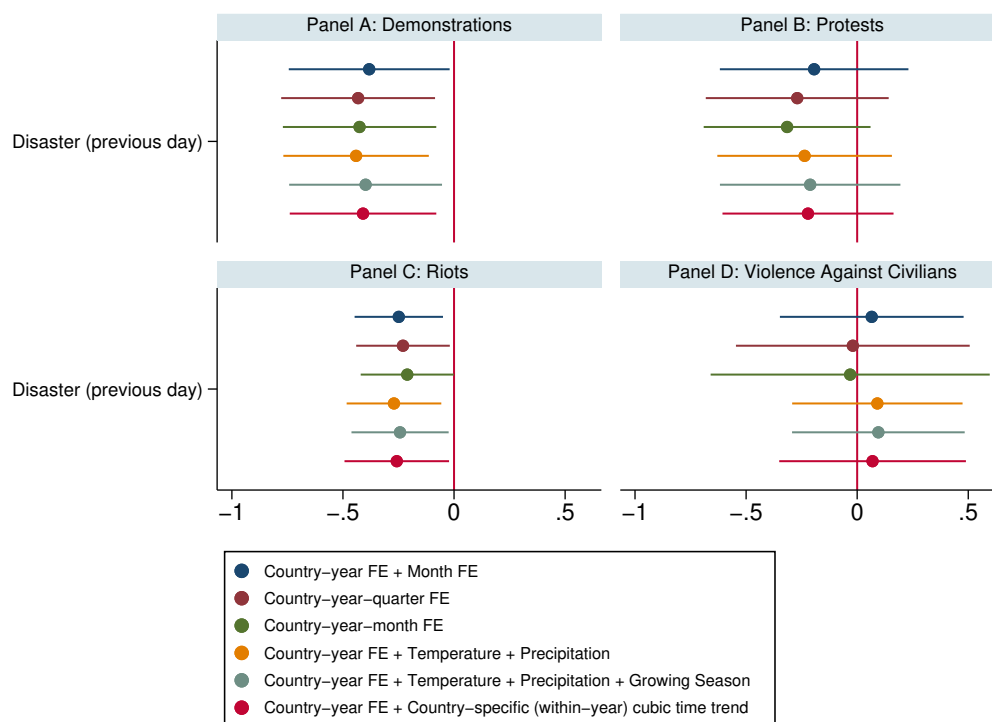
## 6.2 Testing Prediction 1: disasters (unconditional)

The first key prediction from our model is that unanticipated natural disasters in the donor countries should lower the incidence of demonstrations in the recipient countries. To test this, in parts (a) and (b) of Prediction 1, we estimate equation (9) for three core outcome variables: demonstrations, protests, and riots. The first three panels of Figure 6 present the estimated coefficient plots for these three outcomes of

interest. The format of the panels in the figure follow the specifications described above. We see that, as predicted, natural disasters significantly decrease the incidence of demonstrations in the subsequent day for all specifications. The third panel demonstrates that this effect is primarily driven by the incidence riots [rather than for protests (in the second panel)].

The fourth panel of Figure 6 presents the estimated coefficient plots from estimating (9) on the outcome variable of violence against civilians. Part (c) of Prediction 1 expects an ambiguous effect, and we see that the estimated coefficient is not statistically significantly different from zero in all empirical specifications.

Figure 6: Impact of disasters in donor countries (unconditional)



Source: see data description in Section 4.

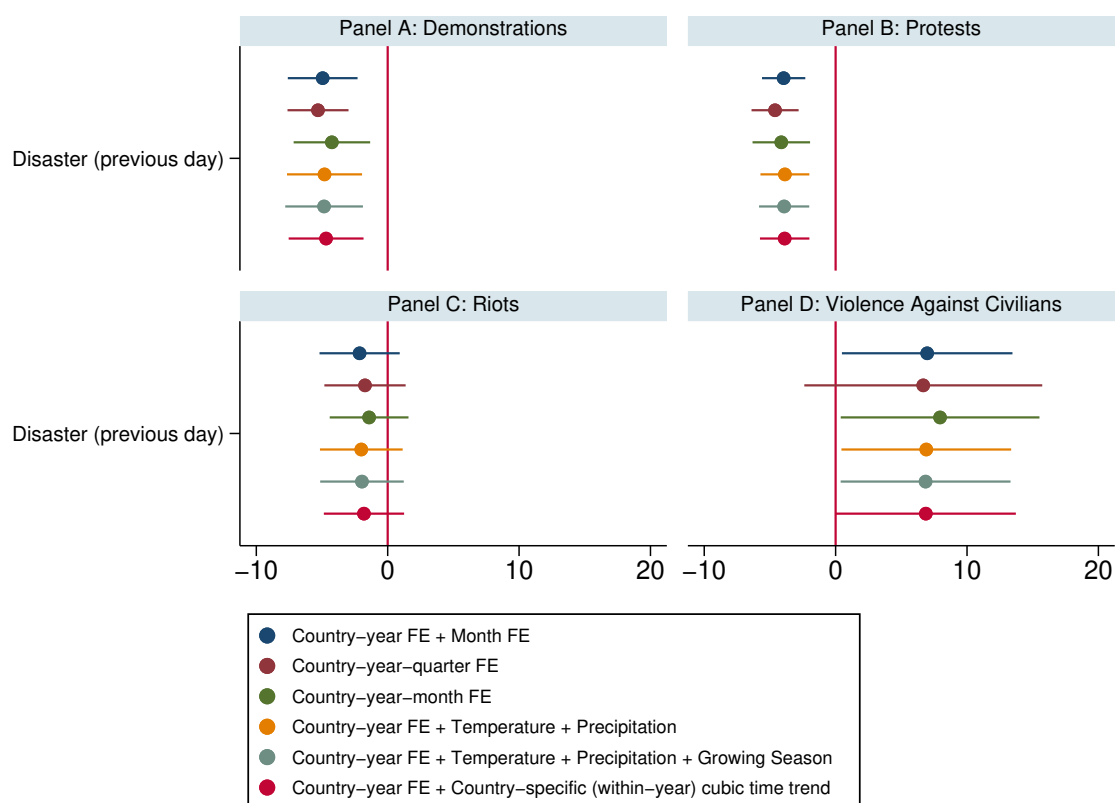
### 6.3 Testing Prediction 2: disasters (conditional)

Our second key prediction is tested by estimating (9) for the same four outcome variables but conditional upon an agitation already being underway. To this end, we restrict the sample to those recipient countries where a riot has already occurred sometime during the previous week (i.e.  $t - 1$  to  $t - 7$ ).

The first three panels of Figure 7 confirm our predictions in parts (a) and (b) of Prediction 2, whereby natural disasters in the donor country in  $t - 1$  are significantly negatively related to the incidence of demonstrations in the recipient country in period  $t$ . We see from the second panel that this is mainly driven by the incidence of protests.

The fourth panel of Figure 7 tests part (c) of Prediction 2. Here we see that natural disasters lead to a significant increase in violence against civilians (in almost all empirical specifications) when conditioning upon a riot already being underway.

Figure 7: Impact of disasters in donor countries (conditional)



Source: see data description in Section 4.

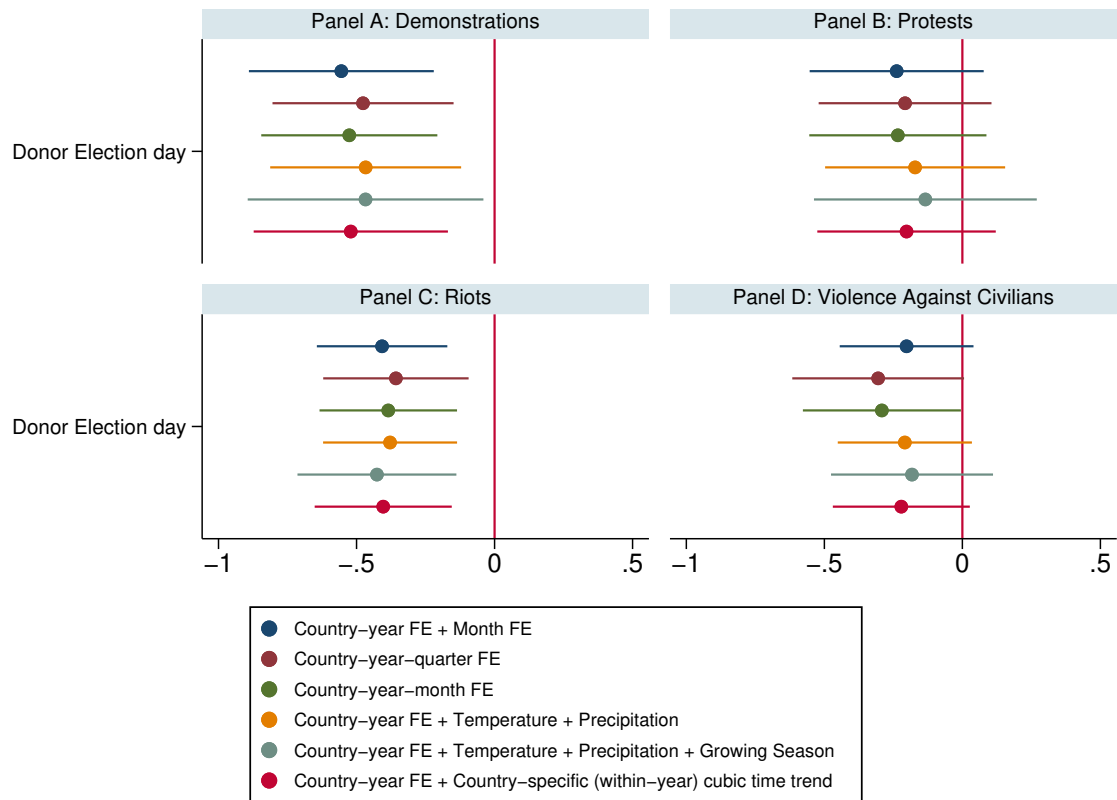
#### 6.4 Testing Prediction 3: elections (unconditional)

We now turn to testing the impacts of anticipated elections in the donor country on political violence in the recipient countries. In this section, we test Prediction 3 by estimating (10) for our four main outcome variables.

The first three panels of Figure 8 test parts (a) and (b) of Prediction 3 and confirm that elections in the donor country significantly decrease the incidence of demonstrations in the recipient country. This effect is primarily driven by the effect on riots.

Part (c) of Prediction 3 is tested in the fourth panel of Figure 8. There we see that anticipated elections lead to a decrease in violence against civilians. This relationship is not statistically significant in general, as expected. Further, we see from the estimated coefficient plot that, also consistent with part (c) of Prediction 3, the estimated coefficient is more negative in this case compared to that of natural disasters, as reported in the fourth panel of Figure 6.

Figure 8: Impact of elections in donor countries (unconditional)



Source: see data description in Section 4.

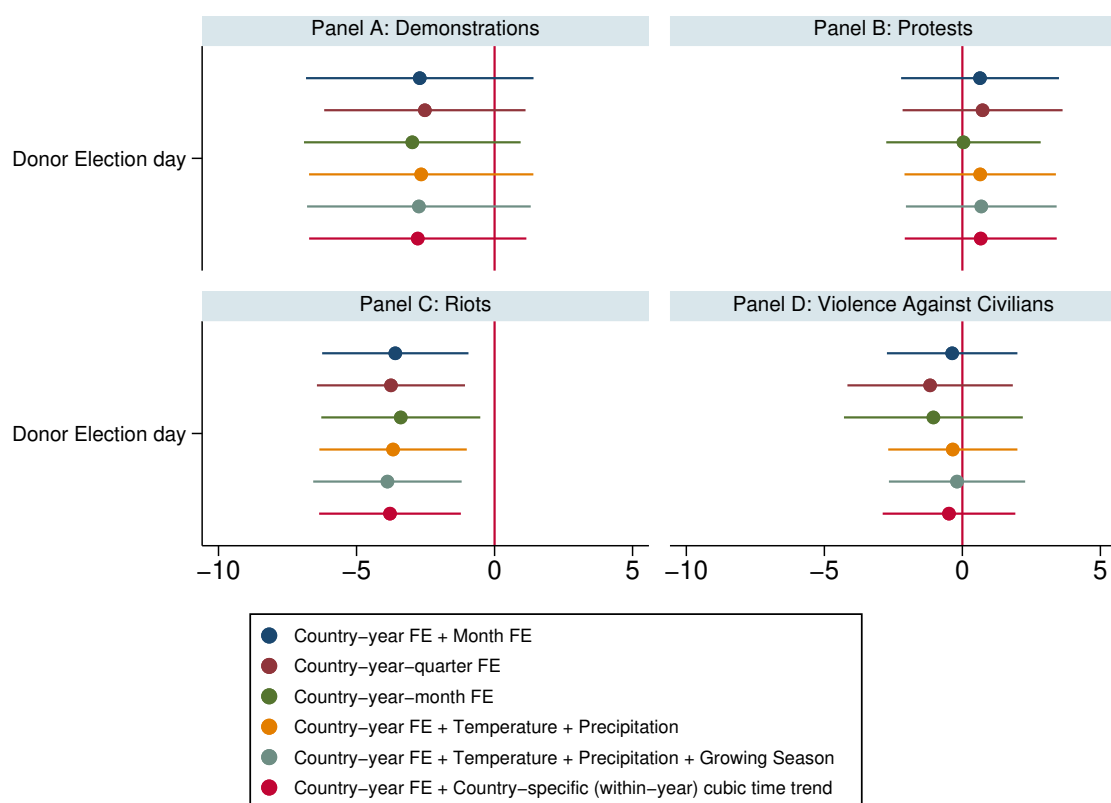
### 6.5 Testing Prediction 4: elections (conditional)

Our final key prediction is tested by estimating (10) for the same four outcome variables but conditional upon an agitation already being underway.

The first three panels of Figure 9 study our predictions in parts (a) and (b) of Prediction 4, whereby anticipated elections in the donor country are significantly negatively related to the incidence of riots in the recipient country in the same period.

The fourth panel of Figure 9 tests part (c) of Prediction 4. We expected to see that elections lead to a significant increase in violence against civilians, when agitation is already underway. Here we do not find a statistically significant relationship.

Figure 9: Impact of elections in donor countries (conditional)



Source: see data description in Section 4.

## 6.6 Mechanism

The estimation results are, on the whole, consistent with the model’s main predictions and hence with its hypothesized mechanisms. Demonstrations decline overall, and at least one of riots or protests falls when donor countries are distracted by elections and by natural disasters [parts (a) and (b) of predictions 1 and 3]. Conditional upon an agitation already being underway in a recipient country, a donor distracting event similarly reduces one of protests or riots [parts (a) and (b) of predictions 2 and 4]. For all of these results, point estimates are consistent with the model’s predictions, and statistically significant at 5 per cent levels in all specifications, with the exception of one prediction [4(a) is significant only at the 10 per cent level].

The anticipated substitution to Violence Against Civilians (VAC) that is expected to occur under donor distraction when an agitation is already underway is observed for disasters, prediction 2(c), and again is statistically significant. The one prediction not supported is a substitution towards VAC under elections when agitations are already underway, prediction 4(c), as shown in panel D of Section 6.5.

The model predicted an increase in VAC conditional upon an agitation because demonstrators would fear increased repression if taking to the streets. They therefore substitute towards direct attacks on civilian government supporters rather than mobilizing en masse and in plain view of security forces. The estimation results show that this does indeed happen when a disaster is the source of donor distraction but not when a donor election takes place. A possible reason is that, since the timing of elections is known in advance, the opposition will only infrequently be involved in an agitation when a donor election arrives, making it harder to detect effects. This contrasts with a distraction event like natural disasters in the donor country. Since these are not anticipated, it is relatively more likely that an agitation will be already underway, and then opposition supporters will substitute away from rioting and into VAC.

This interpretation is consistent with the findings reported for unconditional effects. The point estimates show a more negative decline in VAC with elections than with disasters [panel (D) of Figure 8 compared with panel (D) of Figure 6]. The model's interpretation is that agitations serious enough to induce VAC are less frequent when a donor election is coming but not with disasters since these are unanticipated. Since the situations that would give rise to an increase in VAC with donor distraction occur less frequently with elections, the predicted positive effect is not there. A model assumption is that the distribution of  $\theta$  is such that there is positive mass in all regions, so that all agitations lead to VAC and riots, as well as the more minor forms of dissent such as protests. Relaxing this assumption could make the model consistent with these findings. But since  $\theta$  is not observed and essentially a free parameter, extending the model to fit these observations is hardly a meaningful exercise. We thus conclude from this section a strong degree of support for the model in its stated form, with respect to donor distractions occasioned by disasters. With respect to elections, the evidence is more equivocal and would suggest that at least some (moderate) modification of the model would be needed to fully fit these findings.

## 7 Conclusion

We have found that when donor countries experience natural disasters, or elections, there is less public, civil unrest in African recipient countries. A theoretical model that focuses on the actions taken by opposition forces in recipient countries makes sense of these findings. It also suggests patterns of VAC that are observed to occur around natural disasters but not similarly around elections in donor countries.

In contrast with much of the literature on donor inattention, these findings suggest, at least for the countries of relatively low state capacity in our sample, that it is government reactions rather than actions that are most affected by donor inattention. This in turn affects the decisions made by opposition forces and is consistent with the pattern of muted opposition dissent that we have documented surrounding donor distraction. Increased fear of repression leads to moderation of public unrest (but increased targeted private violence) on the part of African opposition groups.

We have conjectured that the mechanism linking significant, newsworthy donor events (elections and natural disasters) to political activities in recipient countries is citizen inattention. We have provided only stylized and minimal evidence of this in the present paper, but undertaking a more systematic search for the connecting factor would be feasible (though perhaps difficult) using a more comprehensive media content analysis across countries.

## References

- Anderton, C. H., and Brauer, J. (2021). 'Mass Atrocities and Their Prevention'. *Journal of Economic Literature*, 59(4): 1240–92. Available at: <https://doi.org/10.1257/jel.20201458>
- Barbera, S., and Jackson, M. O. (2016). *A Model of Protests, Revolution, and Information* [unpublished working paper].
- Battaglini, M., Morton, R. B., and Patacchini, E. (2020). 'Social Groups and the Effectiveness of Protests'. NBER Working Paper 26757. Cambridge, MA: National Bureau of Economic Research. <https://doi.org/10.3386/w26757>
- Baum, M. A. (2004). 'How Public Opinion Constrains the Use of Force: The Case of Operation Restore Hope'. *Presidential Studies Quarterly*, 34(2): 187–226. Available at: <https://doi.org/10.1111/j.1541-0072.2007.00236.x-i1>
- Besley, T., and Burgess, R. (2002). 'The Political Economy of Government Responsiveness: Theory and Evidence from India'. *The Quarterly Journal of Economics*, 117(4): 1415–51. Available at: <https://doi.org/10.2139/ssrn.319012>

- Canes-Wrone, B. (2010). *Who Leads Whom?* Chicago: University of Chicago Press.
- Cantoni, D., Yang, D. Y., Yuchtman, N., and Zhang, Y. J. (2019). 'Protests as Strategic Games: Experimental Evidence from Hong Kong's Antiauthoritarian Movement'. *The Quarterly Journal of Economics*, 134(2): 1021–77.
- Collier, P., and Hoeffler, A. (2002). 'Aid, Policy and Peace: Reducing the Risks of Civil Conflict'. *Defence and Peace Economics*, 13(6): 435–50. Available at: <https://doi.org/10.1080/10242690214335>
- De Ree, J., and Nillesen, E. (2009). 'Aiding Violence or Peace? The Impact of Foreign Aid on the Risk of Civil Conflict in Sub-Saharan Africa'. *Journal of Development Economics*, 88(2): 301–13. Available at: <https://doi.org/10.1016/j.jdeveco.2008.03.005>
- Djourelouva, M., and Durante, R. (2019). 'Media Attention and Strategic Timing in Politics: Evidence from US Presidential Executive Orders'. CEPR Discussion Paper DP13961. London: Centre for Economic Policy Research.
- Durante, R., and Zhuravskaya, E. (2018). 'Attack When the World is Not Watching? US News and the Israeli-Palestinian Conflict'. *Journal of Political Economy*, 126(3): 1085–133. Available at: <https://doi.org/10.1086/697202>
- Easterly, W. (2003). 'Can Foreign Aid Buy Growth?' *Journal of Economic Perspectives*, 17(3): 23–48. Available at: <https://doi.org/10.1257/089533003769204344>
- Eisensee, T., and Strömberg, D. (2007). 'News Droughts, News Floods, and US Disaster Relief'. *The Quarterly Journal of Economics*, 122(2): 693–728. Available at: <https://doi.org/10.1162/qjec.122.2.693>
- Fearon, J., and Hansen, B. (2018). *The Arms Trade, International Alignments, and International Conflict* [unpublished paper].
- Freedom House. (2020). *Democracy Under Lockdown*. Available at: <https://freedomhouse.org/report/special-report/2020/democracy-under-lockdown>
- Freedom House. (2021). *Freedom in the World, 2021*. Available at: <https://freedomhouse.org/report/freedom-world/2021/democracy-under-siege>
- Kricheli, R., Livne, Y., and Magaloni, B. (2011). 'Taking to the Streets: Theory and Evidence on Protests Under Authoritarianism'. In *Apsa 2010 annual meeting paper*.
- Mueller, J. E. (1973). *War, Presidents, and Public Opinion*. New York: Wiley.
- Nunn, N., and Qian, N. (2014). 'US Food Aid and Civil Conflict'. *American Economic Review*, 104(6): 1630–66. Available at: <https://doi.org/10.1257/aer.104.6.1630>
- Passarelli, F., and Tabellini, G. (2017). 'Emotions and Political Unrest'. *Journal of Political Economy*, 125(3): 903–46. Available at: <https://doi.org/10.1086/691700>
- Rohner, D. (2011). 'Reputation, Group Structure and Social Tensions'. *Journal of Development Economics*, 96(2): 188–99. Available at: <https://doi.org/10.1016/j.jdeveco.2010.10.008>
- Rohner, D. (2022). 'Mediation, Military and Money: The Promises and Pitfalls of Outside Interventions to End Armed Conflicts'. *Journal of Economic Literature*, forthcoming(-): .
- Rohner, D., and Thoenig, M. (2021). 'The Elusive Peace Dividend of Development Policy: From War Traps to Macro Complementarities'. *Annual Review of Economics*, 13(-): 111–31.
- Sachs, J. D. (2006). *The End of Poverty: Economic Possibilities for Our Time*. London: Penguin.
- Sobel, R. (2001). *Impact of Public Opinion on U.S. Foreign Policy Since Vietnam*. New York: Oxford University Press.
- Strömberg, D. (2004). 'Radio's Impact on Public Spending'. *The Quarterly Journal of Economics*, 119(1): 189–221. Available at: <https://doi.org/10.1162/003355304772839560>
- UCDP. (2022). *Uppsala Conflict Data Program*. Available at: <https://ucdp.uu.se/>

## Appendix: Summary statistics

Table A1: Summary statistics of the main variables

Variables	(1) Mean	(2) SD	(3) Min	(4) Max	(5) N
Donor natural disaster (major donor)	0.00766	0.0872	0	1	515,841
Donor natural disaster (any donor)	0.0655	0.302	0	5	515,841
Donor natural disaster (weighted by don. size)	0.00455	0.0327	0	0.790	515,841
Donor election (major donor)	0.000647	0.0254	0	1	524,122
Donor election (any donor)	0.00385	0.0619	0	1	524,122
Donor election (weighted by donation size)	0.000352	0.00966	0	0.752	524,122
ACLED event	0.173	0.378	0	1	378,130
ACLED: Demonstrations	0.0681	0.252	0	1	378,130
Protests	0.0479	0.214	0	1	378,130
Peaceful protest	0.0409	0.198	0	1	378,130
Protest with intervention	0.00763	0.0870	0	1	378,130
Excessive force against protesters	0.00316	0.0561	0	1	378,130
Riots	0.0310	0.173	0	1	378,130
Violent demonstration	0.0215	0.145	0	1	378,130
Mob violence	0.0122	0.110	0	1	378,130
ACLED: Violence against civilians	0.0690	0.253	0	1	378,130
VAC by state forces	0.0197	0.139	0	1	378,130
VAC by rebel groups	0.0191	0.137	0	1	378,130
ACLED: Actor-state forces	0.0614	0.240	0	1	378,130
SCAD: Any event	0.0283	0.166	0	1	478,113
SCAD: Organized demonstration	0.00331	0.0574	0	1	478,113
SCAD: Spontaneous demonstration	0.00561	0.0747	0	1	478,113
SCAD: Organized violent riot	0.000529	0.0230	0	1	478,113
SCAD: Spontaneous violent riot	0.00463	0.0679	0	1	478,113
SCAD: Pro-government violence (repression)	0.00251	0.0501	0	1	478,113
SCAD: Anti-government violence	0.00421	0.0647	0	1	478,113
SCAD: Extra-government violence	0.00639	0.0797	0	1	478,113
SCAD: Intra-government violence	0.000358	0.0189	0	1	478,113
ODA per GNI	0.102	0.114	0	0.949	512,892
Polity2	0.478	5.345	-9	10	511,992

Source: see data description in Section 4.