Terrorism, Stealth Aggression, and Political Opportunism

Navin Bapat, Daniel Gustafson, Rob Williams

September 26, 2018

Abstract

Why do governments respond to terrorist attacks with repression, given that terrorism typically produces insignificant damage, and repression often increases popular support for terrorists? This study argues that governments use repression in response to terrorism for strategic and opportunistic reasons. Strategically, attacks may signal that terrorists are destabilizing the government's control of its territory. Since state power is endogenous to the territory it controls, these losses may precipitously weaken the government and make it vulnerable to external challengers. Governments therefore turn to violence in an effort to maintain territories that are critical to maintaining power. On the other hand, the specter of destabilization allows opportunistic leaders in quasi-democratic regimes to repress political adversaries and retain office indefinitely in the name of fighting terrorism. We find support for these hypotheses using data on African, Asian, and Middle Eastern states from 1992-2010.

On July 22, 2015, the Kurdistan Workers' Party (PKK) claimed responsibility for the assassination of two Turkish police officers in the southeastern city of Sanliurfa. The PKK claimed this attack was in retaliation for Turkey's failure to respond to the Islamic State (IS) attack in Surcuc, which killed over thirty Kurdish civilians. In response, President Recep Tayyip Erdoğan ordered Turkish police and military forces to attack the PKK across the border in Syria and Iraq, but also within Turkey itself. Erdoğan claimed that the mission successfully killed over 3,000 PKK fighters in the southeastern part of the country. Predictably, however, these actions failed to reduce the level of terrorist violence, as PKK attacks continued throughout the latter part of 2015 and into 2016. This escalation is consistent with the finding by numerous empirical studies that government repression often worsens political protest. In addition, direction action against terrorist groups can increase grievances in the targeted population, providing them with more recruits and empowering them in their struggle against the state (Rosendorff & Sandler 2004). This raises the question: why do governments respond to terrorist attacks with large-scale repression, despite the known pattern that government violence often worsens anti-regime instability?

This study proposes an explanation for why governments use such violence in response to terrorist attacks. We argue that repression is motivated by one of two factors. First, governments may fear that attacks signal that terrorists are gaining control of key territories in the state. Losing control of these territories to terrorists may shift power away from governments, thereby creating a commitment problem where the government cannot credibly counter other internal threats from dissidents and external threats from rivals. Although repression is often ineffective, it may be a rational last-ditch action to prevent terrorists from destabilizing key territories. However, since governments may maintain private information about the true risk posed by terrorists in particular territories, strategic leaders may exploit fears of terror to repress their political adversaries. We therefore argue that political opportunism is a second factor that motivates repression, in that terrorist attacks give leaders in quasi-democratic states cover to neutralize political opposition indefinitely. For

these leaders, the threat of terrorism is good politics, in that it enables them to retain power indefinitely.

We proceed with this argument in several steps. First, we discuss how repression is often counterproductive in fighting terrorism. Second, we present the strategic argument for how terrorist activity at the micro-level may destabilize the government's control over its territory, thereby triggering shifts in power that may lead to internal and external crises. Third, we outline how the fear of these power transitions enables leaders to opportunistically exploit the threat of terrorism for their own political gain. Fourth, we present an empirical test of the model's hypotheses using geo-coded data from the GTD and the UCDP GED. We conclude by discussing our results and further areas of research.

Terrorism and the Destabilization of Sovereignty

Although political elites claim that terrorism represents a significant security threat to the state, case study and quantitative empirical work demonstrate that many terrorist groups are internally dysfunctional, and often fail within ten years without accomplishing their strategic objectives (Abrahms 2012, Cronin 2009, Jones & Libicki 2008, Shapiro 2013, Shapiro & Siegel 2007, Shapiro & Siegel 2012, Gaibulloev & Sandler 2014). However, while terrorists frequently fail to achieve their strategic objectives, recent studies demonstrate that these groups wield considerably more power in smaller geographic areas (de la Calle & Sánchez-Cuenca 2012, Findley & Young 2012). In these limited areas, terrorists may credibly threaten civilians with violence, particularly if these localities are more remote or difficult for the state to access (Buhaug, Gates & Lujala 2009, Fearon & Laitin 2003, Fjelde & De Soysa 2009, Hendrix 2010).

Facing the credible threat of violence, civilians may cooperate with terrorists in several ways. First, civilians may avoid cooperating with government authorities or divulging information about terrorist whereabouts (Kalyvas 2006, Weinstein 2007). Second, civilians

may refrain from paying taxes to the government, and instead pay tribute to the terrorists in their area. This racketeering activity serves a dual purpose in that it denies the government revenue while increasing the group's resource base. Third, civilians may fight for the terrorists, or may provide services, work infrastructure, or by sell commodities, including lucrative black market items such as drugs or gems (Lujala 2010, Sorens 2011, Rustad & Binningsbø 2012, Suárez 2000). Gradually, as cooperation deepens at the local level, the terrorists transition into insurgencies that assume the role of the state. This provides the group with a tax base, a supply of fighters, some degree of infrastructure, and an economic system under their command.

As terrorists take control over local pockets of territory, the loss of the territory's tax revenue, fighters, and commodities may endogenously weaken the government. This effect is often limited, as terrorists and insurgencies tend to thrive in those areas that are peripheral to the state's interest (Scott 2009, Schutte 2015). However, if hostile terrorists encroach on an area of greater strategic import, terrorist activity could precipitously weaken the state and leave it vulnerable to other internal and/or external challengers, as well as the terrorists themselves.

To illustrate, consider the example of Saudi Arabia. Saudi Arabia's dependence on oil is substantial, with the petroleum industry accounting for approximately 90% of its total economy and nearly all of its exports. About half of the Kingdom's total production is drawn from the Ghawar oil field in the Eastern Province. The Eastern Province is also home to a substantial population of Shia Muslims, many of whom are antagonistic to the strict Wahabbism of the royal family. This opposition has led to the growth of dissident groups in the Eastern Province. While some of these groups, such as Saudi Hezbollah, appear openly aligned with Iran, others are calling for independence for the Eastern Province.

Both international meddling and domestic unrest are troublesome for the Kingdom. If the Saudis' hold on the Ghawar oil field were to destabilize, the Kingdom would lose its biggest source of revenue, and potentially place its other oil fields in jeopardy. Given the importance

of oil to the Kingdom's economy, Saudi power is critically dependent on keeping control of the Ghawar oil field. Therefore, even if Shia terror groups are only successful locally, the destabilization of the Eastern province could create a cascading effect that could undermine Saudi control of the entire territory. This loss might embolden rival Iran to challenge Saudi influence throughout the Middle East. The importance of the Eastern Province indicates that the Kingdom will do anything in its power to prevent terrorists from destabilizing its control over this critical territory.

Although violence is one option to prevent the loss of territory, the more efficient way for governments to stop the process of destabilization is to negotiate with the local population to maintain their support, avoiding the costs of fighting (Fearon 1995, Wagner 2000). Governments may offer to exchange investment, infrastructure, goods, or cash in an effort to convince the locals to maintain cooperation and refrain from cooperating with the terrorists. The peaceful strategy of negotiation is preferable, given that violence will destroy at least some of the territory's valuable assets. This may include the territory's oil facilities, bridges, infrastructure, and most importantly, its civilians and working population.

However, the bargaining literature identifies that negotiation may fail if one of the parties cannot credibly fulfill the commitments they make (Powell 2006, Walter 2009). In the case of negotiation with civilians in a disputed province, governments may make concessions to civilian leaders to convince them to refrain from cooperating with terrorists. Yet, *ex ante*, governments cannot perfectly identify if civilian leaders are truly separate from the terrorists, or if terrorists are misrepresenting themselves as civilian leaders (Bueno de Mesquita & Dickson 2007). Therefore, any negotiated settlement might unwittingly provide resources to the terrorists, which will likely use these new resources to continue fighting the state. Governments may therefore argue that repression is the only possible response to terrorist activity if the group is destabilizing territory and shifting power away from the state.

Additionally, governments will be especially likely to react violently if they believe that the terrorists they face are agents of a hostile, foreign rival. Empirically, state sponsored

terrorists are often characterized as more violent and less prone to collapse (Byman 2005). However, an added danger of foreign terrorists is the possibility that they may seize territory and transition to an insurgency. This seizure of land may deprive the government of key resources in the form of commodities or tax bases while increasing the rival's access to valuable territory. This, in turn, may endogenously weaken the government and leave it vulnerable to open challenges from this same rival in the future. We can see this dynamic in the case of Saudi Arabia and the Eastern province. The Kingdom faced a terrorist organization with known connections to its regional rival of Iran. Given the threat posed by a foreign rival potentially weakening the government, we would expect the Saudis to react violently rather than risk unstable negotiation that could strengthen their territorial rivals. This logic leads to our first hypothesis.

Hypothesis 1. *Governments are more likely to respond to terrorism with repression if the government is engaged in an interstate territorial rivalry.*

Terrorism and Political Opportunism

Governments may therefore justify repression as necessary to contain terrorists supported by external rivals. However, this logic of this argument only holds if these shifts in power are large, rapid, and extensive enough such that the government will be in a disadvantageous position in the future. The problem, however, is that empirically identifying these conditions is often quite difficult. Presumably, governments have private information about how valuable particular territories are, and how critical these areas are to supporting their tax base and ability to support their defense capabilities. Governments may also have private information about the nature of the terrorist activity in an area. For example, intelligence services may be able to trace the attack to particular groups, which may be identified as separatist organizations, or known proxies of foreign states. This private information may afford governments with the intelligence they need to accurately decide if the conditions

justifying repression are met, and if state violence is an appropriate policy response.

For example, consider the case of India's conflict with various Kashmiri terrorist organizations. Based on public source material, it is difficult to assess the degree to which India faces a threat from both Lashkar-e-Taiba and Jaish-e-Mohammad. Empirically, the Indian Army is far more powerful than either organization. Yet, either of these organizations could potentially acquire some nuclear capability with Pakistani support, and it is unclear how much popular support both groups have within Kashmir itself. While it is difficult to make such an assessment from public source material, it stands to reason that the Indian government likely maintains some private information about the true extent of the threat posed by both. Similarly, while Hezbollah may appear to be a significant threat to many Israelis, it is likely that the Israeli Defense Forces (IDF) has more access to information and a better threat assessment than the body politic.

This asymmetry in information may allow governments to strategically misrepresent the threat posed by terrorist groups. Empirically, we know the vast majority of terrorist groups are weak (Abrahms 2012, Shapiro & Siegel 2007, Shapiro & Siegel 2012). We also know that although some territories are critical to the government's survival, terrorists and insurgencies tend to thrive in peripheral areas of the state that may be less valuable. Given their weaknesses, and the marginal nature of the territory from which they tend to operate, we would expect governments to easily defeat these groups. Doing so demonstrates nothing about the capability of the government, or by extension, the competence of the state's leadership.

On the other hand, suppose a leader signals that a terrorist group is a powerful organization, and has the capability to seize critical territory that will weaken the state. Initially, these claims may seem far-fetched. However, if the leader continues to repeat such claims, her coalition may assume that she has better quality information about the group and the threat that it poses. The coalition may therefore come to view the terrorists as significant threats to their security and the survival of the state itself.

This creates an interesting set of incentives for leaders seeking to retain power. To retain

power, leaders may have incentives to signal to their supporters that the threat of terrorism is significant, particularly in cases where terrorists are weak. Once the leader's supporters believe that terrorists are powerful, leaders may have incentives to use repression in an effort to appear competent. Here, repression is more likely to succeed given that leaders will strategically adopt his behavior only when they are facing weaker terrorist groups. In these cases, where terrorists are weaker, *leaders may have strategic incentives to magnify the threat posed by these groups in order to bolster their popular support.* If a leader's supporters are convinced that they face a real threat of destabilization at the hands of a domestic or foreign terrorist threat, high profile captures or killings of terrorist leaders are likely to reinforce the perception that leaders are strong and competent. Repression may therefore serve as a tool of political expediency that reinforces the survival of political leaders.

To illustrate, let us return to the example of the escalation of violence between Turkey and the Kurds. A month before the attacks, Erdoğan's Justice and Development Party (AKP) lost its parliamentary majority for the first time in thirteen years. When a government coalition failed to form, President Erdoğan declared that new elections would be scheduled for November. Soon after, Erdoğan adopted the hardline response against the PKK, and claimed that the group was leading a campaign to ethnically cleanse the southeastern part of the country to further their independence goals. Moreover, Erdoğan claimed that this effort by the PKK was being directly supported by the United States, which was arming the Kurds to fight ISIS fighters. Erdoğan charged that these U.S. efforts were threatening Turkish sovereignty, and that Turkey would fight "anything that threatens us along the Syrian border, inside or out" (Yackley 2015). Erdoğan was essentially declaring that Turkey faced an existential threat from the PKK supported by the United States.

Let us consider the strategic implications of this strategy. By portraying the PKK as a threat of this magnitude, Erdoğan gained the ability to attack the standing of the largely Kurdish Peoples' Democratic Party (HDP). HDP leader Selahattin Demirtas accused Erdoğan of attempting to use the conflict to push the HDP vote down so that it fell below a 10%

threshold, which in turn would bolster the position of the AKP. Additionally, by tying the HDP to the United States, Erdoğan seemed to be playing on the fact that 58% of Turks viewed the U.S. unfavorably (Poushter 2015). This suggests that Erdoğan's behavior, and his denunciations of both the PKK and the U.S., may have been less of an effort to reduce terrorism and more of an effort to bolster his electoral standing.

Governments may strategically misrepresent the nature of a terrorist group in two ways. They may characterize a terrorist group as the agent of a foreign state or overstate the group's strength to justify a violent crackdown. We now consider the conditions under which leaders are more likely to use the threat of terrorism for domestic political gain. First, we argue that governments consider the mix of regime supporters and dissidents in a location before employing violent repression. If a leader is concerned with maintaining her hold on power, she will be sensitive to the wishes of her selectorate. As a result, a government would be unlikely to use violence against regime supporters due to fear of replacement. However, governments may have incentives to crack down on domestic rivals and dissidents. Using violence against excluded groups can weaken domestic rivals and strengthen the incumbent leader's hold on power. This leads to our second hypothesis.

Hypothesis 2. *Governments are more likely to respond to terrorism with repression if there is an excluded group in the area of the attack.*

Second, we argue that regime type of a government is a fundamentally important predictor of opportunistic repression. Theoretically, a pure authoritarian would have no motive to use a terrorist attack as cover to repress, given that she already has this ability and can use it without justification. Conversely, a pure democratic leader may not have the opportunity to respond to terrorism with violent repression against her citizenry, due to executive constraints, institutional barriers, and norms. However, politicians in a competitive authoritarian system have both the motive and the opportunity to use repression and leverage terrorist threats to solidify their ruling coalitions. These regimes retain the opportunity to resort to extra-judicial force through their military, police, or paramilitary units.

These regimes further have both the motive to engage in this behavior and the most to gain. Suppose repression is indiscriminate, and pushes a population to support anti-regime elements, including those militants aligned with either a domestic opponent, foreign rival, or both. The rise of this anti-government coalition places the leader's supporters in a difficult dilemma. Presumably, the leader provides these supporters with some mix of public and private goods. Replacing this leader would compromise this favorable arrangement. To make matters worse, if the coalition backed by the excluded group and/or foreign rival grows in power, they will demand a greater share of the political benefits as part of a negotiated settlement. This will force the leader's supporters to surrender even more of their benefits as part of a compromise. As a result, when the leader is facing powerful terrorist adversaries, her supporters will have an incentive to double down on their support in order to maintain their favorable position over the domestic opposition.

This creates a perverse incentive for the incumbent leader when facing such domestic rivals. If repression strengthens the power of the domestic rival's coalition, repression may force the leader's supporters to keep the leader in power indefinitely. Leaders are relying on the fear their supporters have of losing control over the distribution of the society's goods. Perversely, this gives the leader an even greater incentive to use repression to maintain her power. This leads to our third hypothesis.

Hypothesis 3. *Competitive authoritarian governments are more likely to respond to terrorism with repression than both pure autocracies and pure democracies.*

Research Design

To empirically test our hypotheses, we carry out an analysis of state responses to terrorist attacks using geocoded data in Africa, the Middle East, and Asia from 1992 to 2010. We draw from two sources of geocoded data for our analyses. We use terrorist attack data from the Global Terrorism Database (GTD) project (LaFree & Dugan 2007, LaFree 2010) which

contains location, date, and fatality numbers on over 100,000 terrorist attacks worldwide from 1970-2015. For information on repression we employ the UCDP Georeferenced Event Data (GED) (Sundberg & Melander 2013) which contains location and date information on government repression of civilians and clashes with rebel groups from 1990-2016 in Africa, Asia, and the Middle East (excluding Syria). We thus restrict our analysis to Africa, Asia and the Middle East, and we limit our sample to countries experiencing some level of political violence, but not engaged in civil wars. We choose to use this sample because the process of deciding whether or not to use repression following a terrorist attack is fundamentally different during times of peace or civil war. The countries in which we are interested are those experiencing a low to moderate amount of violence. Thus, our sample is made up of all terrorist attacks occurring within country-years that have between 25 and 999 deaths resulting from political violence.[1] The population data begin in 1990 and the rivalry data end in 2010, so our sample contains observations from 1990-2010. Figure 1 presents the distributions of all variables in our analysis graphically. Table 2 presents descriptive statistics numerically.

Our unit of analysis is the terrorist attack. While the end of the rivalry data in 2010 prevent the inclusion of more recent attacks, this limitation actually allows us to avoid a major threat to inference. The GTD switched to a new data collection procedure in 2012 that resulted in a "dramatic increase in the total number of worldwide terrorist attacks over 2011," so by excluding data after 2010 we avoid biasing our results due to differences in the number of events reported. While we would like to investigate the effect of transnational terrorist attacks, this status is uncertain for 46.56% of the attacks in our sample.

Our dependent variable *repression* is a binary measure of whether a government violently responds to a given terrorist event. In order to create this variable, we define a spatio-temporal window in which an act of repression is considered to be in response to a given terrorist attack. For our main model, we use a circle with a 50 km radius and 15 days for

---

[1] We include the results of models estimated using alternative samples in the appendix.
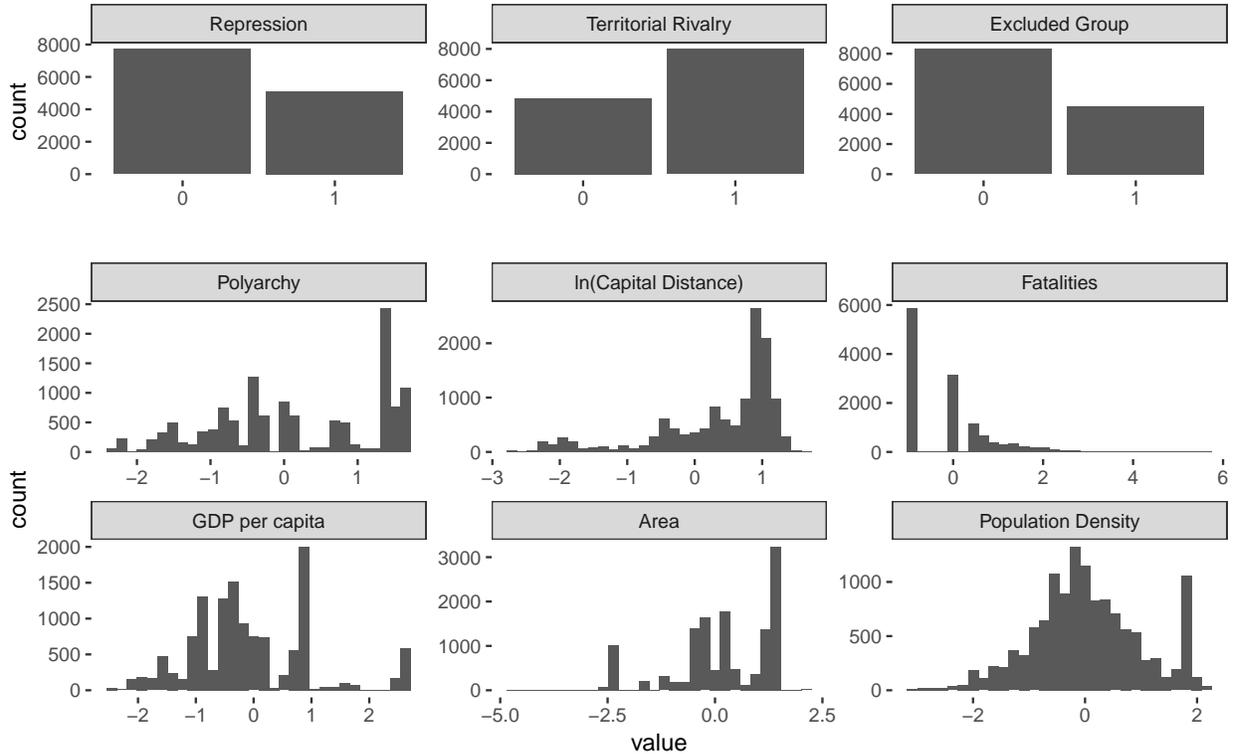
Figure 1: Distributions of dependent and independent variables.

this space-time window.[2] Therefore, any act of repression within 50 km and 15 days of a given terrorist attack will result in the dependent variable being coded 1.[3]

In order to evaluate H_1, we use a measure of international rivalry from Thompson & Dreyer (2012). Given our argument's focus on territory and concerns over losing territory to foreign powers, we use a measure of *spatial rivalry* which only includes rivalries over disputed territory. While many types of international rivalries exist, we limit ourselves to these spatial rivalries because they are the most salient to concerns about foreign subversion of territory (Bapat & Zeigler 2015). This variable is dichotomous and takes a value of 1 if a given state is involved in a territorial rivalry in the year that an attack takes place.

To test H_2, we include a measure of whether a terrorist attack occurs in an area where an *excluded* ethnic group resides. This variable comes from GeoEPR (Wucherpfennig, Weid-

---

[2]We present results using other spatiotemporal coding rules in our appendix. The relationship largely holds across different temporal specifications.

[3]See the appendix for a full discussion of the geocoding procedure.

mann, Girardin, Cederman & Wimmer 2011, Vogt, Bormann, Rüegger, Cederman, Hunziker & Girardin 2015) and we code this variable as 1 if an attack occurred within the territory of a group whose EPR status is discriminated, powerless, or excluded in the year the attack occurred.
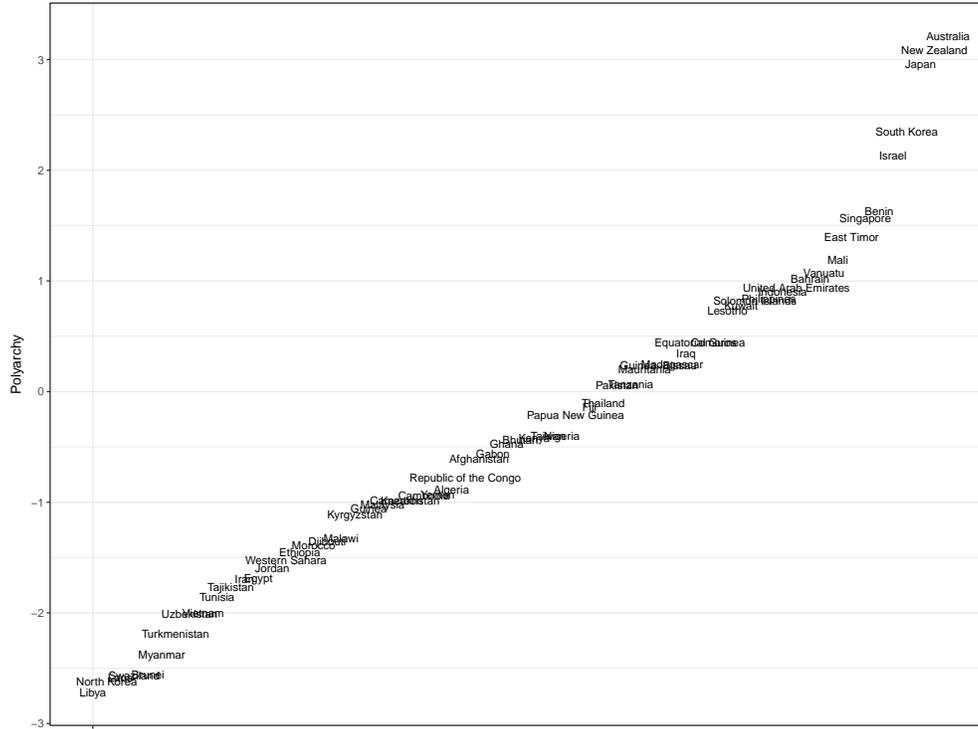
Figure 2: This figure shows the average *polyarchy* measure for each country in the sample from 1992-2010.

We use the *polyarchy* variable from the Varieties of Democracy (V-Dem) dataset to assess H_3 (Coppedge *et al.* 2017). V-Dem divides democracy into electoral, liberal, participatory, deliberative, and egalitarian aspects, and the *polyarchy* variable captures the degree to which electoral democracy is achieved in a given country-year based upon a combination of several indices of electoral behavior and expert opinion. Polyarchy captures "the core [democratic] value of making rulers responsive to citizens," (Coppedge *et al.* 2017, 49) so this variable aligns well with our theoretical argument that leaders may use repression in hybrid regimes to gain increased political support. This measure is continuous, ranging in our sample from a minimum of .086 (Iraq in 1992) to a maximum of .774 (Israel in 1994 and 1995). Figure

1 shows the average measure *polyarchy* for each country across all 20 years in our sample. Because we believe that competitive authoritarian regimes are most likely to respond to terrorism with repression, we expect this variable to have a curvilinear relationship with the likelihood of repression. Therefore, we include the squared term of *polyarchy* to capture this inverted-U relationship.

We condition our analysis on several variables that may be related to the likelihood that a government uses repression in response to a given terrorist attack and our explanatory variables of interest. First, we use three spatial control variables including the *distance to the capital* within a country, the *area* of a given country, and the *population density* where the terrorist attack occurred. We include the log-transformed *distance to the capital* in km to account for the fact that governments will be more likely to violently crackdown in areas which they control (Buhaug 2010). We use the *area* of a country in km^2 in our model to control for differences in distance across country size (Buhaug & Lujala 2005). Finally, we control for *population density* to account for the possibility that the likelihood of a repressive response is contingent on the distribution of citizens in a given area (Raleigh & Hegre 2009, Braithwaite & Johnson 2015).[4]

In addition to our spatial control variables, we control for one other event-level variable and one country-year level variable. First, we include a log-transformed measure of the number of *fatalities* that result from a given terrorist attack. The inclusion of this variable accounts for the idea that governments may be more likely to employ repression following the most lethal terrorist attacks. Second, we control for the per capita *GDP* in a given country-year to capture the effect of state capacity on the likelihood of repression given a terrorist attack. We log-transform this variable to account for non-normality.

---

[4]We record *population density* in persons/km^2 by extracting the value at the location of each attack from the Gridded Population of the World (GPW) v4 data, a global dataset that provides population density information in 30 arc-second ($\approx$ 1km) grid cells (Center for International Earth Science Information Network - CIESIN - Columbia University 2015).

	Model 1
Territorial Rivlary	0.52*
	(0.26)
Polyarchy	1.23*
	(0.45)
Polyarchy^2	−1.15*
	(0.47)
Excluded	1.47*
	(0.06)
ln(Capital Distance)	0.15*
	(0.04)
ln(Fatalities)	0.23*
	(0.03)
ln(GDP$_{PC}$)	0.07
	(0.10)
Area	−0.36*
	(0.09)
Population Density	0.13*
	(0.03)
(Intercept)	−1.67*
	(0.18)
σ_α^2	1.35
Observations	12829

$^*p < 0.05$

Table 1: Logistic regression results pooled from all five imputed datasets with standard errors corrected using Rubin's rules (Rubin 1987). σ_α^2 is the variance of the 268 country year random intercepts.

Results

We estimate a logistic regression with random intercepts by country-year since we have an event-level dependent variable and several country-year level explanatory variables. We use multiple imputation via the `mice` package in R (van Buuren & Groothuis-Oudshoorn 2011) to account for missingness in three of our control variables. Therefore, we estimate five separate regressions via maximum likelihood and pool the results for presentation using Rubin's rules (Rubin 1987). Table 2 contains the pooled results of the logistic regression with random intercepts by country-year on our multiply imputed datasets. It shows the estimated coef-

ficient, standard error, p-value, and 95% confidence interval for each independent variable. In general, we find support for each of our hypotheses.
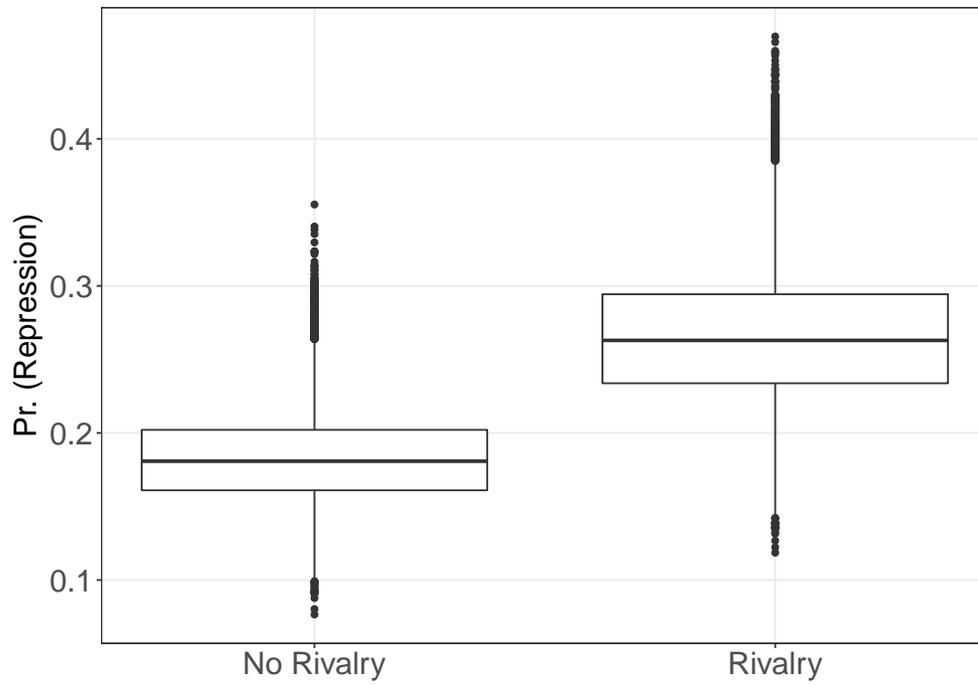
Figure 3: This figure shows the predicted probability of repression following a terrorist attack absent a territorial rivalry (left) and when a state has an international rival (right). The thick horizontal line in each box shows the median predicted probability. The thin bars are the first and third quartiles of the predicted probabilities, and the whiskers approximate a 95% credible interval.

H_1 suggested that states that were engaged in international territorial rivalries would be more likely to use repression in response to terrorist attacks. We find a positive association between the presence of a spatial rivalry and the likelihood that a state will use violent repression. The p-value on the *spatial rivalry* variable is .06. Therefore, while it falls just outside of the conventional range of statistical significance, we can be reasonably confident in the positive association. Additionally, we find a sizeable substantive impact of the presence of an international territorial rivalry. Figure 3 shows the predicted probability of repression in the absence and presence of a spatial rivalry.[5] Here we see that the predicted probability

---

[5] For all of our predicted probabilities, we use the median country-year random effect (Somalia in 1996).

of repression following a terrorist attack is about .18 in countries that are not engaged in territorial rivalries. However, the predicted probability of repression rises to about .26 in countries that are involved in spatial rivalries. Thus, our model suggests that governments engaged in territorial international rivalries are roughly 44% more likely on average to use repression following a terrorist attack. This finding lends support to the argument that governments with an international rival may use repression out of a legitimate fear that rivals are attempting to destabilize territory.
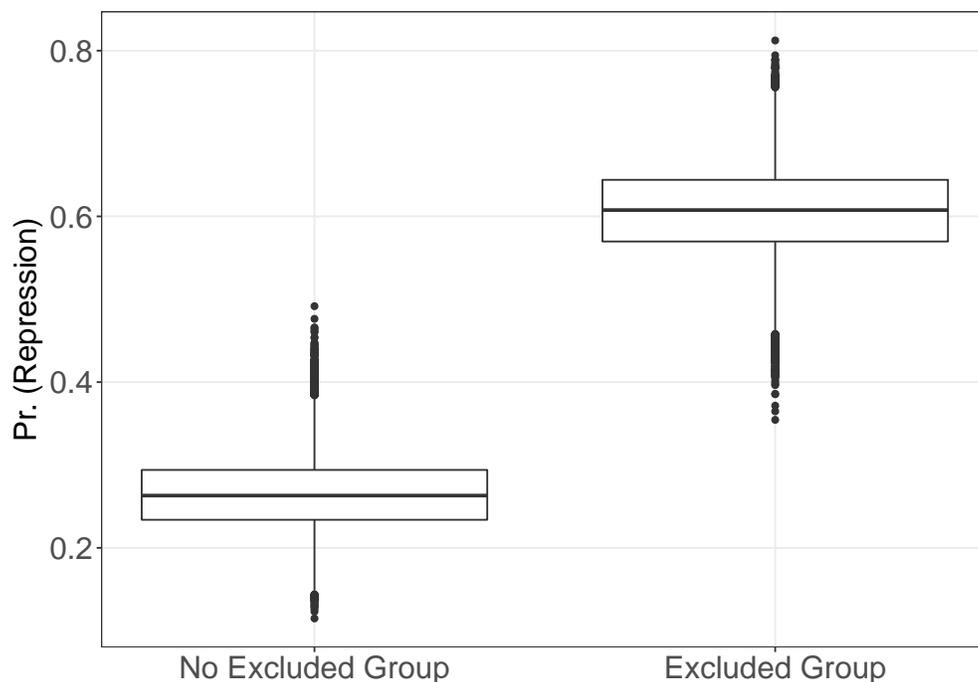
Figure 4: This figure shows the predicted probability of repression following a terrorist attack absent an excluded group (left) and when an attack occurs in an area where an excluded minority group resides (right). The thick horizontal line in each box shows the median predicted probability. The thin bars are the first and third quartiles of the predicted probabilities, and the whiskers approximate a 95% credible interval.

H_2 suggests that states will be most likely to respond to terrorism with repression when the terrorist attack occurs in a region with an excluded ethnic minority. The coefficient on our binary indicator *excluded* is positively associated with the likelihood of repression and statistically different from 0 at the $p < .05$ level. In addition, we find a large substantive

effect for the presence of an excluded population on the likelihood of repression following a terrorist attack. Figure 2 shows boxplots for the predicted probability of repression when an attack occurs away from an excluded population (left) and in territory where an excluded minority resides (right). Our model predicts that states will use repression following terrorist attacks with probability .26 when the attack occurs in an area without a politically excluded minority group. This probability jumps to .61 when the attack occurs in a region with an excluded population, constituting a roughly 135% increase. Therefore, we find support for our expectation that terrorist attacks occurring in a region populated by an excluded minority group will be more likely to lead to government repression. This suggests that terror can be used opportunistically to attack excluded groups.
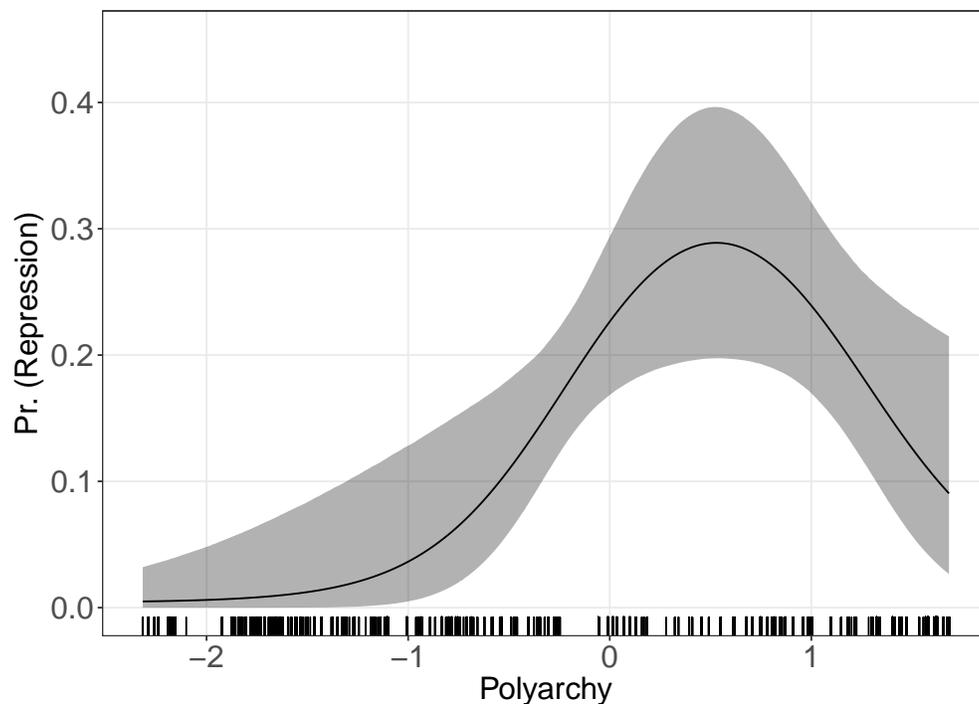
Figure 5: This figure shows the predicted probability of repression following a terrorist attack as a function of *polyarchy* absent a territorial rivalry (left) and when a state has an international rival (right). The grey shaded area shows the 95% confidence intervals, and the black tick-marks on the bottom of each panel show the distribution of observed values of *polyarchy*.

Finally, leading up to H_3, we argued that competitive authoritarian regimes would be

more likely than both pure autocracies and democracies to respond to a terrorist attack with repression if they were engaged in an interstate rivalry. From Table 2, we can see that the *polyarchy* measure is positively related to the likelihood of repression, and the *polyarchy*^{2} term is negatively associated with the likelihood of repression following a terrorist attack. Both of these terms are statistically significant at the $p < .05$ level. These trends suggest an inverted-U relationship between *polyarchy* and the likelihood of repression following a terrorist attack, supporting our hypothesis.

We present the predicted probability of repression as a function of *polyarchy* and *spatial rivalry* in Figure 4 along with 95% confidence intervals. The left side of Figure 4 shows the probability of repression over values of *polyarchy* conditional on a state not being involved in a spatial rivalry, and the right side shows the probability given that a state is engaged in a territorial rivalry. In each case, the predicted probability of repression following a terrorist attack is maximized for competitive authoritarian regimes. Interestingly, our model predicts the likelihood of repression to be lowest for the most autocratic states and at a moderate level for the most democratic states in our sample.[6]

Our model predicts a probability of repression of about 0 for the most autocratic states. This may reflect the fact that repression is still occurring in these states, but that information is so tightly controlled that the events fail to be included in the newswire services that the GED draws on. The predicted probability of repression for the most democratic states is about .09. Additionally, the probability of repression following a terrorist attack reaches a maximum of about .29 when states for quasi-democratic countries. These results support our hypothesis that competitive authoritarian governments will be the most likely to respond to terrorism with repression.

We find that several of our control variables have an effect that is statistically different from 0. First, the *distance from the capital* where an attack occurs is positively associated with the likelihood of repression following a terrorist attack. Thus, our model indicates

---

[6]This is likely driven by Israel's inclusion in the sample, as the Israeli state has one of the higher *polyarchy* measures and repressive events in the sample.

that governments are more likely to use repression as a response to terrorist attacks as they occur in less state-controlled areas. Next, we find that the number of *fatalities* that a terrorist attack causes is positively associated with the likelihood of repression. This finding is intuitive, as governments are more likely to violently crackdown following larger terrorist attacks. Finally, we a positive association between the *population density* of the area where an attack takes place and the likelihood that a government will respond with repression. This indicates that states are more likely to use repression as a response to terrorist attacks in cities and other densely populated areas.

Conclusion

This study began with the question: why do governments respond to terrorist attacks with violence, given that the damage these groups cause is often inconsequential and violence typically increases popular support for terrorist groups? We identify two explanations for this behavior. First, we argue that while terrorists typically fail in their strategic aims, these groups can be effective at undermining government control in smaller geographic areas. Terrorist attacks in these areas may signal that the government is losing control in smaller pockets of its territory. Since a state's power is endogenous to the territory and the population in controls, the loss of some of these territories may significantly harm a government's ability to defend itself against internal, and more importantly, external adversaries. This problem is particularly concerning if terrorists have foreign support. In these cases, terrorist activity may represent an effort by a foreign state to destabilize the government's power. Further, since these terrorists are foreign agents, the government may be unable to negotiate with these groups. As a result, governments may turn to repression in a desperate effort to disarm the terrorist group, and protect its territory from foreign rivals.

The threat of losing key territories to terrorists opens the door for governments to use repression opportunistically. Since governments maintain private information about how

significant a threat terrorist groups pose, governments may exploit the fear of these groups to repress their political adversaries. Doing so may enable leaders to stay in power indefinitely, and permanently marginalize any political threats to their rule. We demonstrate that leaders may bolster their standing by attacking excluded groups following terrorist attacks, and are more likely to do so in competitive authoritarian systems. In these states, leaders may face some political competition, and have the ability to use force against their populations. These results demonstrate that governments may have strategic reasons to repress following terrorist attacks, leaders may also manipulate the threat of terrorism in order to maximize their retention.

Our results also show that international rivalries can have huge implications for the domestic politics of rival countries. Territorial rivalries can lead to increased tensions between states, and they can also lead increased violence within states in two ways. First, international opponents may be sponsoring terrorist groups within their rival's borders, leading to increased anti-government violence. Second, the presence of an international rivalry can lead governments to believe that repression represents their best recourse in the wake of a terrorist attack. The conclusion that an international rivalry can affect domestic politics continues a growing trend of international relations research on the effects of the international system of intrastate policies.

These findings contribute to the abundant literature that attempts to explain puzzling empirical patterns of repressive responses. By accounting for the domestic political calculus of leaders—especially those in competitive authoritarian regimes—we show that government repression is not necessarily an overreaction to terrorist attacks. It may be the best response to a foreign rival, or it could be a calculated decision made by a leader trying to maintain her hold on power. While violent repression may lead politically excluded populations to take up arms against the government, domestic political gains can outweigh this risk.

References

Abrahms, Max. 2012. "The Political Effectiveness of Terrorism Revisited." *Comparative Political Studies* 45(3):366–393.

Bapat, Navin A. & Sean Zeigler. 2015. "Terrorism, Dynamic Commitment Problems, and Military Conflict." *American Journal of Political Science* pp. n/a–n/a.

Bivand, Roger, Colin Rundel, Edzer Pebesma & Karl Ove Hufthammer. 2016. "Rgeos: Interface to Geometry Engine - Open Source (GEOS).".

Braithwaite, Alex & Shane D. Johnson. 2015. "The Battle for Baghdad: Testing Hypotheses About Insurgency From Risk Heterogeneity, Repeat Victimization, and Denial Policing Approaches." *Terrorism and Political Violence* 27(1):112–132.

Bueno de Mesquita, Ethan & Eric S. Dickson. 2007. "The Propaganda of the Deed: Terrorism, Counterterrorism, and Mobilization." *American Journal of Political Science* 51(2):364–381.

Buhaug, Halvard. 2010. "Dude, Where's My Conflict? LSG, Relative Strength, and the Location of Civil War." *Conflict Management and Peace Science* 27(2):107–128.

Buhaug, Halvard & Päivi Lujala. 2005. "Accounting for Scale: Measuring Geography in Quantitative Studies of Civil War." *Political Geography* 24(4):399–418.

Buhaug, Halvard, Scott Gates & Päivi Lujala. 2009. "Geography, Rebel Capability, and the Duration of Civil Conflict." *Journal of Conflict Resolution* 53(4):544–569.

Byman, Daniel. 2005. *Deadly Connections: States That Sponsor Terrorism.* Cambridge, UK ; New York: Cambridge University Press.

Cederman, Lars-Erik, Andreas Wimmer & Brian Min. 2010. "Why Do Ethnic Groups Rebel?: New Data and Analysis." *World Politics* 62(1):87–119.

Center for International Earth Science Information Network - CIESIN - Columbia University. 2015. Gridded Population of the World, Version 4 (GPWv4): Population Density. Technical report NASA Socioeconomic Data and Applications Center (SEDAC) Palisades, NY: .

Center for International Earth Science Information Network - CIESIN - Columbia University; United Nations Food and Agriculture Programme - FAO; Centro Internacional de Agricultura Tropical - CIAT. 2005. Gridded Population of the World, Version 3 (GPWv3): Population Count Grid. Technical report NASA Socioeconomic Data and Applications Center (SEDAC) Palisades, NY: .

Coppedge, Michael, John Gerring, Staffan I. Lindberg, Svend-Erik Skaaning, Jan Teorell, David Altman, Frida Andersson, Michael Bernhard, M. Steven Fish & Adam Glynn. 2017. "V-Dem Codebook V7.".

Cronin, Audrey. 2009. *How Terrorism Ends: Understanding the Decline and Demise of Terrorist Campaigns.* Princeton: Princeton University Press.

de la Calle, Luis & Ignacio Sánchez-Cuenca. 2012. "Rebels without a Territory An Analysis of Nonterritorial Conflicts in the World, 1970–1997." *Journal of Conflict Resolution* 56(4):580–603.

Fearon, James D. 1995. "Rationalist Explanations for War." *International Organization* 49(3):379–414.

Fearon, James D. & David D. Laitin. 2003. "Ethnicity, Insurgency, and Civil War." *The American Political Science Review* 97(1):75–90.

Findley, Michael G. & Joseph K. Young. 2012. "Terrorism and Civil War: A Spatial and Temporal Approach to a Conceptual Problem." *Perspectives on Politics* 10(02):285–305.

Fjelde, Hanne & Indra De Soysa. 2009. "Coercion, Co-Optation, or Cooperation?: State Capacity and the Risk of Civil War, 1961—2004 *." *Conflict Management and Peace Science* 26(1):5–25.

Gaibulloev, Khusrav & Todd Sandler. 2014. "An Empirical Analysis of Alternative Ways That Terrorist Groups End." *Public Choice* 160(1-2):25–44.

Hendrix, Cullen S. 2010. "Measuring State Capacity: Theoretical and Empirical Implications for the Study of Civil Conflict." *Journal of Peace Research* 47(3):273–285.

Hijmans, Robert J., Jacob van Etten, Joe Cheng, Matteo Mattiuzzi, Michael Sumner, Jonathan A. Greenberg, Oscar Perpinan Lamigueiro, Andrew Bevan, Etienne B. Racine, Ashton Shortridge & Aniruddha Ghosh. 2017. "Raster: Geographic Data Analysis and Modeling.".

Jones, Seth G. & Martin C. Libicki. 2008. How Terrorist Groups End. Product Page RAND.

Kalyvas, Stathis. 2006. *The Logic of Violence in Civil War*. Cambridge; New York: Cambridge University Press.

LaFree, Gary. 2010. "The Global Terrorism Database: Accomplishments and Challenges." *Perspectives on Terrorism* 4(1).

LaFree, Gary & Laura Dugan. 2007. "Introducing the Global Terrorism Database." *Terrorism and Political Violence* 19(2):181–204.

Lujala, Päivi. 2010. "The Spoils of Nature: Armed Civil Conflict and Rebel Access to Natural Resources." *Journal of Peace Research* 47(1):15–28.

Poushter, Jacob. 2015. "Deep Divisions in Turkey as Election Nears.".

Powell, Robert. 2006. "War as a Commitment Problem." *International Organization* 60(1):169–203.

Raleigh, Clionadh & Håvard Hegre. 2009. "Population Size, Concentration, and Civil War. A Geographically Disaggregated Analysis." *Political Geography* 28(4):224–238.

Rosendorff, B. Peter & Todd Sandler. 2004. "Too Much of a Good Thing?: The Proactive Response Dilemma." *Journal of Conflict Resolution* 48(5):657–671.

Rubin, Donald. 1987. *Multiple Imputation for Nonresponse in Surveys.* Wiley.

Rustad, Siri Aas & Helga Malmin Binningsbø. 2012. "A Price Worth Fighting for? Natural Resources and Conflict Recurrence." *Journal of Peace Research* 49(4):531–546.

Schutte, Sebastian. 2015. "Geography, Outcome, and Casualties A Unified Model of Insurgency." *Journal of Conflict Resolution* 59(6):1101–1128.

Scott, James. 2009. *The Art of Not Being Governed: An Anarchist History of Upland Southeast Asia.* New Haven: Yale University Press.

Shapiro, Jacob. 2013. *The Terrorist's Dilemma: Managing Violent Covert Organizations.* Princeton: Princeton University Press.

Shapiro, Jacob N. & David A. Siegel. 2007. "Underfunding in Terrorist Organizations." *International Studies Quarterly* 51(2):405–429.

Shapiro, Jacob N. & David A. Siegel. 2012. "Moral Hazard, Discipline, and the Management of Terrorist Organizations." *World Politics* 64(01):39–78.

Sorens, Jason. 2011. "Mineral Production, Territory, and Ethnic Rebellion: The Role of Rebel Constituencies." *Journal of Peace Research* 48(5):571–585.

Suárez, Alfredo Rangel. 2000. "Parasites and Predators: Guerrillas and the Insurrection Economy of Colombia." *Journal of International Affairs* 53(2):577–601.

Sundberg, Ralph & Erik Melander. 2013. "Introducing the UCDP Georeferenced Event Dataset." *Journal of Peace Research* 50(4):523–532.

Thompson, William & David R. Dreyer. 2012. *Handbook of International Rivalries: 1494-2010.* Washington, DC: SAGE/CQ Press.

van Buuren, Stef & Karin Groothuis-Oudshoorn. 2011. "Mice: Multivariate Imputation by Chained Equations in R." *Journal of Statistical Software* 45(3).

Vogt, Manuel, Nils-Christian Bormann, Seraina Rüegger, Lars-Erik Cederman, Philipp Hunziker & Luc Girardin. 2015. "Integrating Data on Ethnicity, Geography, and Conflict The Ethnic Power Relations Data Set Family." *Journal of Conflict Resolution* 59(7):1327–1342.

Wagner, R. Harrison. 2000. "Bargaining and War." *American Journal of Political Science* 44(3):469–484.

Walter, Barbara F. 2009. "Bargaining Failures and Civil War." *Annual Review of Political Science* 12(1):243–261.

Weidmann, Nils B., Doreen Kuse & Kristian Skrede Gleditsch. 2010. "The Geography of the International System: The CShapes Dataset." *International Interactions* 36(1):86–106.

Weinstein, Jeremy. 2007. *Inside Rebellion: The Politics of Insurgent Violence.* Cambridge ; New York: Cambridge University Press.

Wucherpfennig, Julian, Nils B. Weidmann, Luc Girardin, Lars-Erik Cederman & Andreas Wimmer. 2011. "Politically Relevant Ethnic Groups across Space and Time: Introducing the GeoEPR Dataset." *Conflict Management and Peace Science* 28(5):423–437.

Yackley, Ayla Jean. 2015. "Erdogan Says Turkey May Hit U.S.-Backed Syrian Kurds to Block Advance." *Reuters* .

Appendix

Descriptive Statistics

	N	Min.	Max.	Mean	Median
Repression	12829	0	1	—	0
Spatial Rivalry	12829	0	1	—	1
Excluded	12829	0	1	—	0
Polyarchy	12829	0.086	0.774	0.514	0.491
ln(Dist. Capital)	12829	0	8.277	5.742	6.480
ln(Fatalities)	12631	0	5.930	0.694	0.693
ln(GDP$_{pc}$)	12679	5.087	10.330	7.461	7.205
ln(Area)	12829	7.454	16.055	13.528	13.687
Population Density	12827	0.036	10.612	6.344	6.165

Table 2: Descriptive Statistics

Geocoding

To create our response variable, and a number of our spatially varying explanatory variables, we employ a geocoding process which draws on a number of preexisting data sources. The following appendix lists these data sources, describes the measures we create, and provides pseudocode that details the specific processes necessary to create the variables.

We get our information on terrorist attacks from the Global Terrorism Database (GTD) (LaFree & Dugan 2007, LaFree 2010). We drop attacks which occur before 1990, as this is when our population data start. We also drop attacks without geocoded location data, which reduces the sample from 170,350 to 48,649 observations. By limiting terrorist attacks to those that occur inside countries within our sample, we end up with 34,731 observations. We drop attacks that occur within the geographic borders of a state but are coded as occurring in another state, which results in our final sample size of 33,269 observations. Most of the cases are cross-border attacks e.g. an attack in Iraq that is coded as targeting Iran. This also results in dropping approximately 50 attacks in China that are coded as occurring in Macau or Hong Kong.
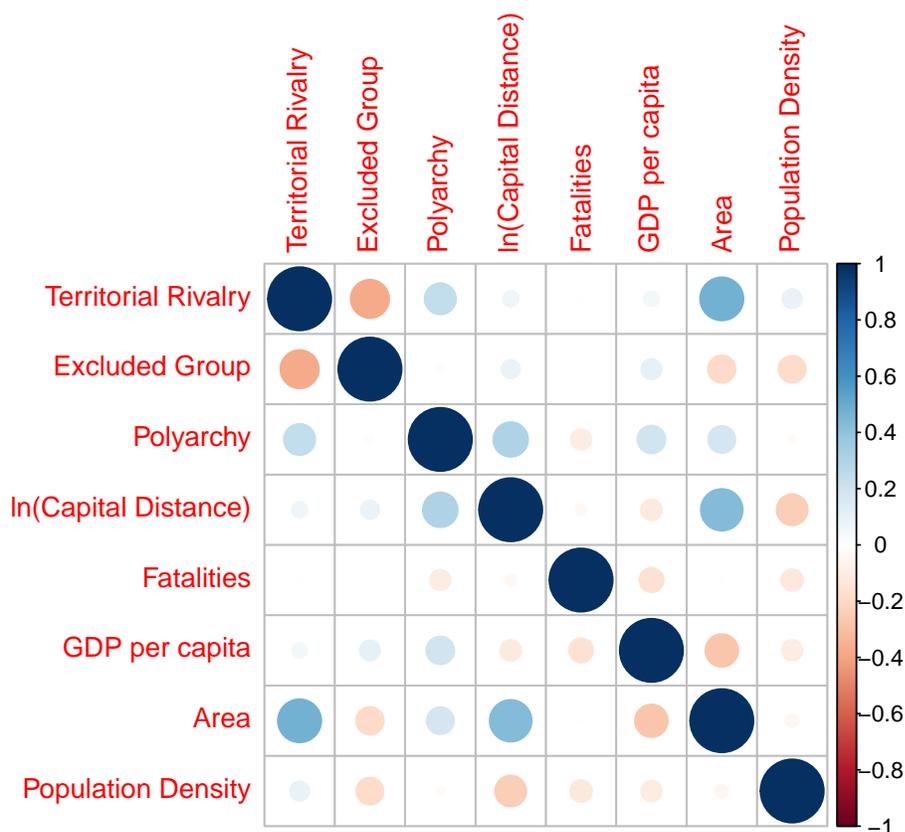
Figure 6: Correlation of explanatory variables. Correlations are calculated on the average of five imputed datasets.

We get our data on state repressive violence from the UCDP Georeferenced Events Dataset (GED) (Sundberg & Melander 2013). These data provide information on all organized political violence reported by news services in Africa, Asia, and the Middle East from 1989 to present. To capture state repressive violence, we limit our sample to incidents of state-based one sided violence (OSV) against civilians. We also include state-rebel violence, which can capture attempts by states to repress known opposition groups. In our analysis, we combine both types of state based violence to code our dependent variable. However, we also conduct robustness checks using both types of violence separately.

We get our information on excluded ethnic groups from the Ethnic Power Relations

(EPR) family of datasets. We use the GeoEPR dataset (Wucherpfennig et al. 2011, Vogt et al. 2015) to gather information on the location of ethnic group settlement areas throughout the world. We combine these data with the EPR Core dataset (Cederman, Wimmer & Min 2010, Vogt et al. 2015) to create time-varying measures of when ethnic groups are excluded from the political process. We thus end up with a series of polygons representing excluded ethnic groups. When an ethnic group manages to attain political power, its polygon drops out from our sample. However, if the group then loses political access, it will re-enter our sample in the year it once more becomes excluded.

For geographic information on states, we use the CShapes dataset (Weidmann, Kuse & Gleditsch 2010). These data contain country polygons for every state in the international system since 1945. In addition, it contains the latitude and longitude coordinates of each country's capital, which we use to calculate the distance from each attack to the capital. The data also contain information on the geographic area (in km^2) of each country.

We rely on several geographic datasets to produce the variables used in our analysis. The Gridded Population of the World (GPW) dataset provides estimates of world population by grid cell in five year intervals. We use two different versions of these data, the v3 dataset (Center for International Earth Science Information Network - CIESIN - Columbia University; United Nations Food and Agriculture Programme - FAO; Centro Internacional de Agricultura Tropical - CIAT 2005) and the v4 dataset (Center for International Earth Science Information Network - CIESIN - Columbia University 2015). The v3 dataset contains population estimates for 1990, 1995, and 2000, while the v4 dataset contains estimates for 2000, 2005, 2010, and 2015. Unfortunately, the two versions use different size grid cells fo their estimates, so we cannot simply combine the two datasets. Thus, we face two problems that we need to address before we can measure the population density at the location of each terrorist attack in our data.

First, we need to realign the geographic extent of the population data so that all years in the data use the same size grid cell. The v3 dataset uses 2.5 arc-minute grid cells, which

are approximately 5km at the equator. The v4 dataset uses 30 arc-second grid cells, which are approximately 1km at the equator. To achieve this, we use the `resample` function in the `raster` R package to convert the 30 arc-second grid cells in the 2000, 2005, 2010, and 2015 layers to the 2.5 arc-minute scale in the 1990 and 1995 layers. Since the data are at different resolutions, we use bilinear interpolation to resample the later, more fine-grained data to the coarser resolution of the earlier population data. These operations are carried out using the `raster` package in R (Hijmans, van Etten, Cheng, Mattiuzzi, Sumner, Greenberg, Lamigueiro, Bevan, Racine, Shortridge & Ghosh 2017).

Second, we linearly impute the missing years in the interval between each quinquennial observation. We use an R script from `https://gist.githubusercontent.com/johnbaums/10465462/raw/c81b418d689efaf265dd66ec0e491cb54f2d20f3/lintemp.R`, which performs cell-wise linear temporal interpolation for a series of rasters observed over time. This script produces a series of raster images from 1990-2015, which covers out entire sample. These images allow us to capture yearly variation in population, leading to more accurate estimates of the effect of population on the probability of violent state response to a terrorist attack.

The full R code to carry out these operations can be found in the file `01 Functions.R`, which includes the main function `geocode.repress()`, as well as several supplementary functions. This function uses data on terrorist attacks, repressive violence, state geography, and excluded ethnic groups. For a given space-time window, it codes *repression* as 1 if an incident of repressive violence occurs within r km and d days. We do this by first subsetting the repressive attack data to events occurring within d days of the terrorist attack and then using the `rgeos` package (Bivand, Rundel, Pebesma & Hufthammer 2016) to define a circle with radius r centered on the terrorist attack and checking if any incidents of repressive violence lie within that circle. Figure 7 illustrates this procedure.

Figure 7 illustrates the danger of double-counting events as the length of time d grows. This concern is addressed by running models using multiple different space-time windows for coding below.
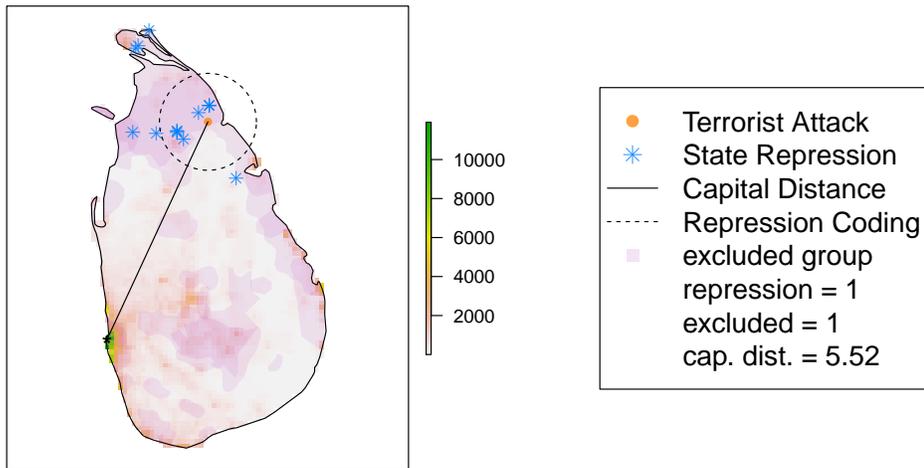
(a) Terrorist attack in Sri Lanka on August 12, 2007.
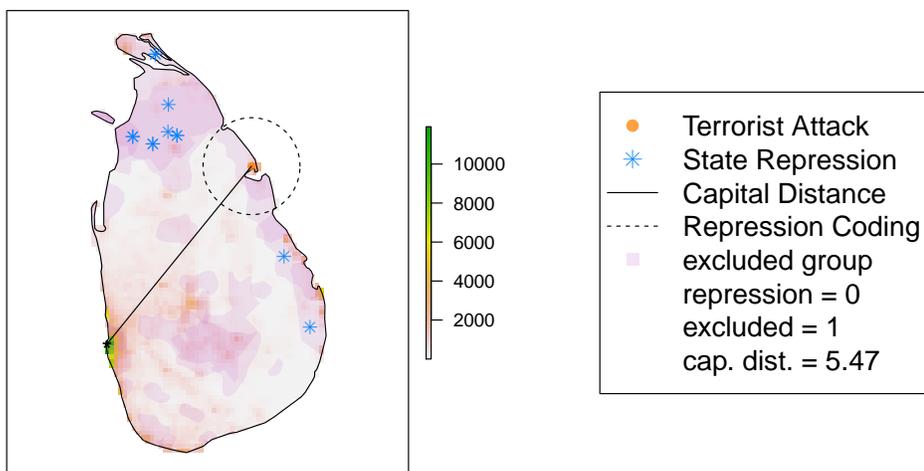
(b) Terrorist attack in Sri Lanka on July 20, 2007.

Figure 7: Two illustrations of the geocoding procedure. The orange circle represents the terrorist attack that is being coded, while the blue stars are incidents of state violence that occur within 15 days of the attack. The dashed circle is the 50km cutoff used to code the outcome variable *repression*. The solid line represents the distance from a terrorist attack to the state capital. Purple regions indicate the territories of politically excluded ethnic groups.

Model Fit
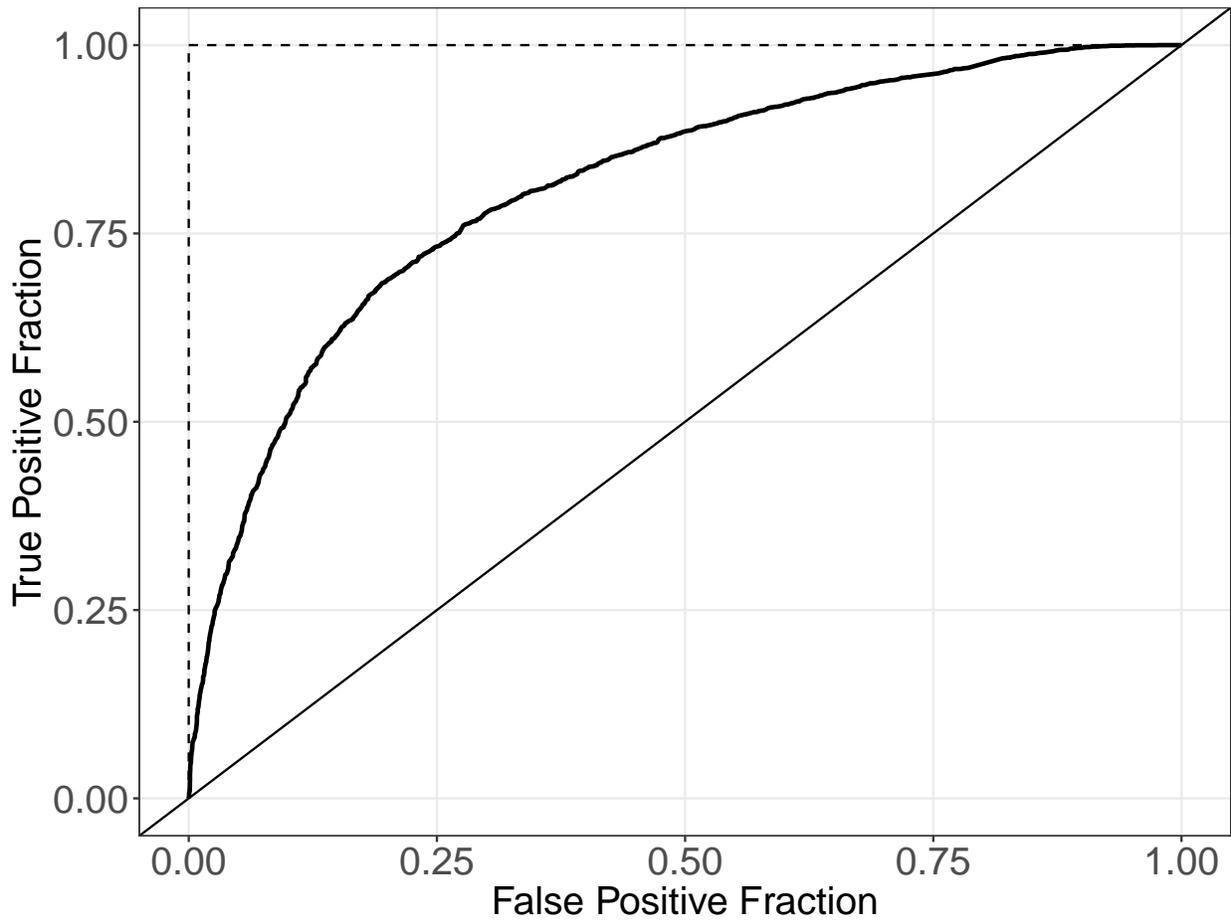
Figure 8: This figure shows the receiver operating characteristic (ROC) curve for the model. The area under the ROC curve is .81, making it a fairly good discriminator.

Robustness Checks

In this section, we provide robustness checks for the spatio-temporal window that we use to define our outcome variable, *Repression.*

(a)

(b)

(c)

(d)
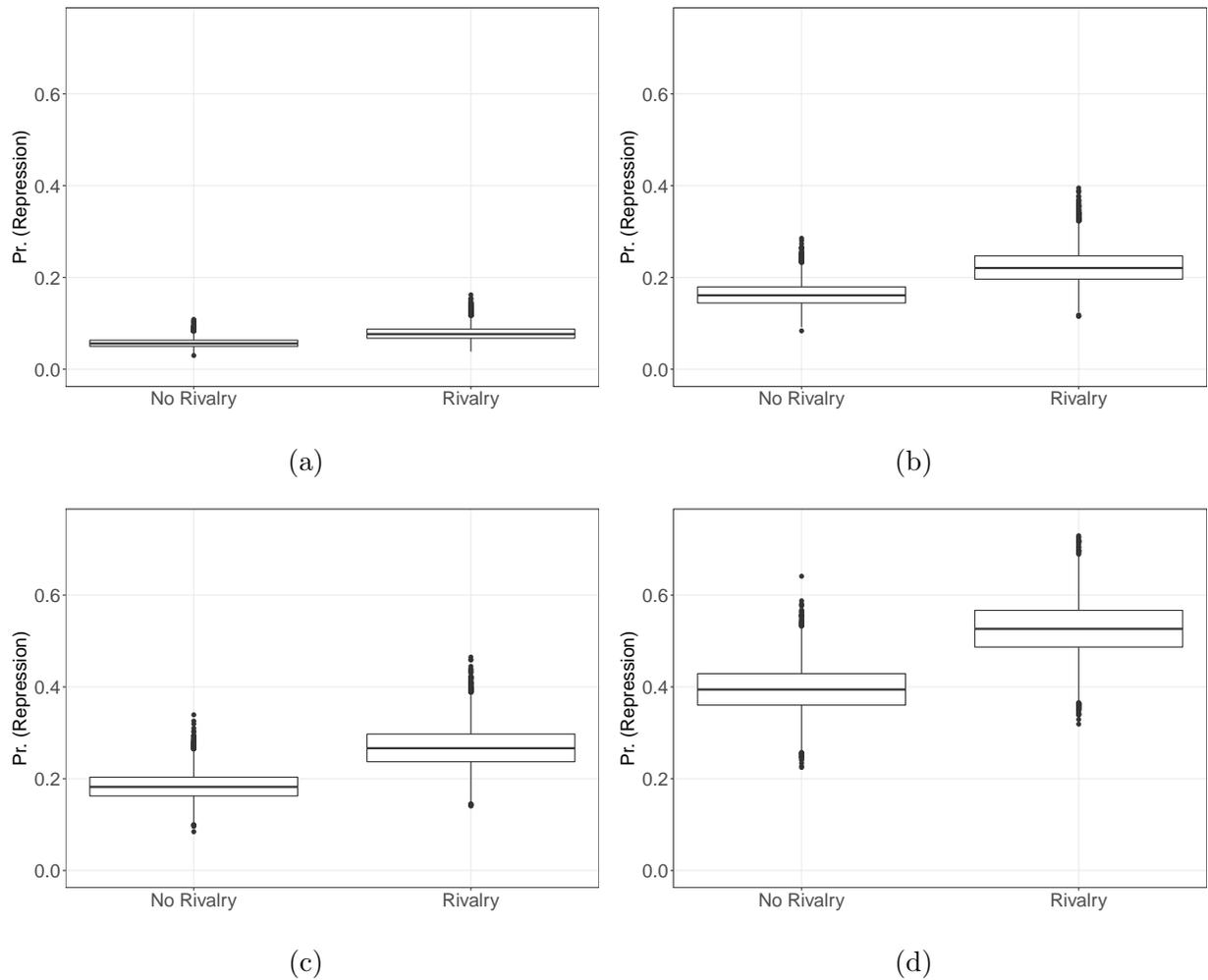
Figure 9: This figure shows the predicted probability of repression as a function of whether a state is engaged in an international territorial rivalry. Each plot results from a separate model with an outcome variable (repression) that relies upon a different temporal coding. Panel (a) uses a measure of repression within 5 days, panel (b) 10 days, panel (c) 15 days, and panel (d) 30 days.

(a)

(b)

(c)

(d)
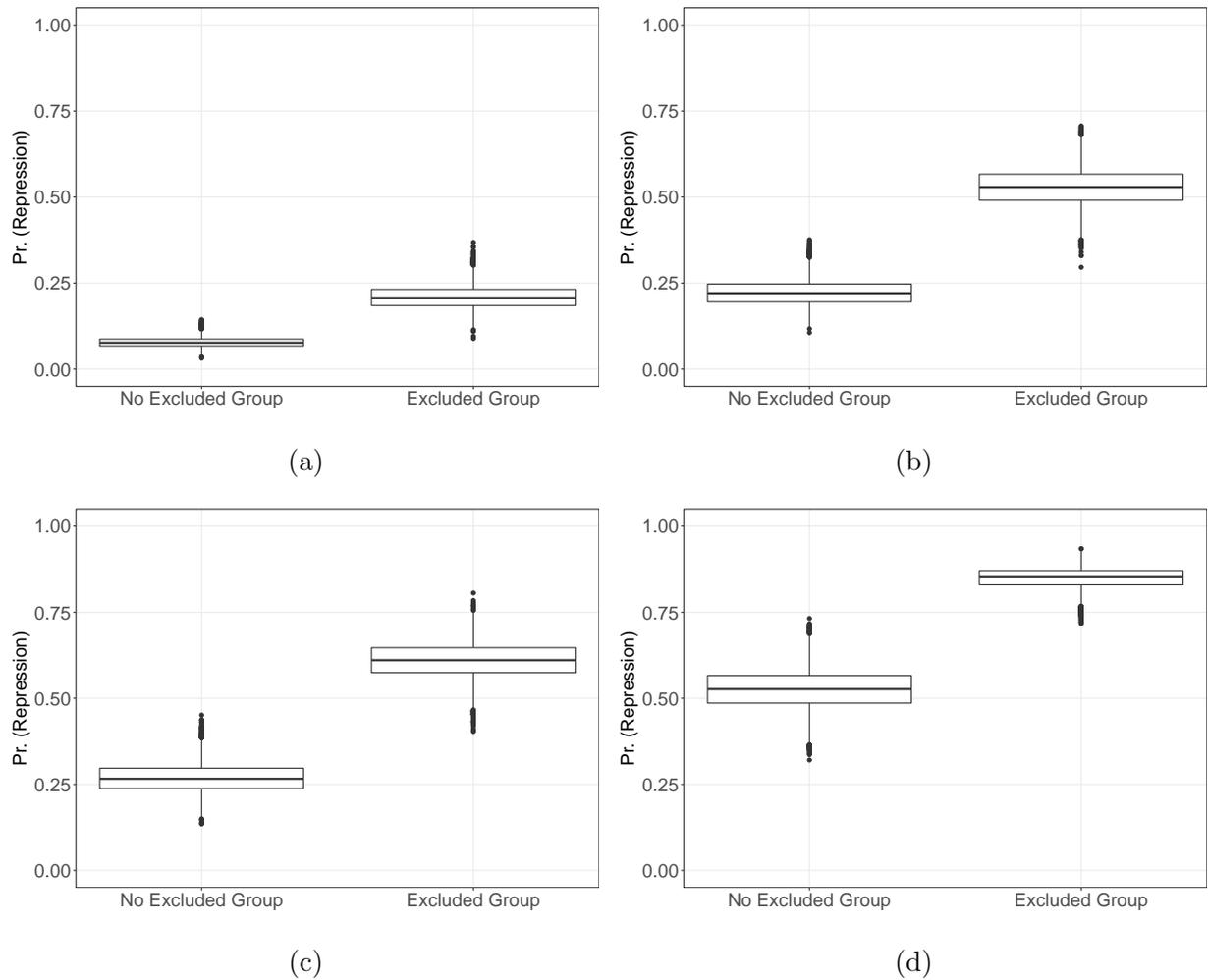
Figure 10: This figure shows the predicted probability of repression as a function of whether an excluded group resides in the area of the attack. Each plot results from a separate model with an outcome variable (repression) that relies upon a different temporal coding. Panel (a) uses a measure of repression within 5 days, panel (b) 10 days, panel (c) 15 days, and panel (d) 30 days.
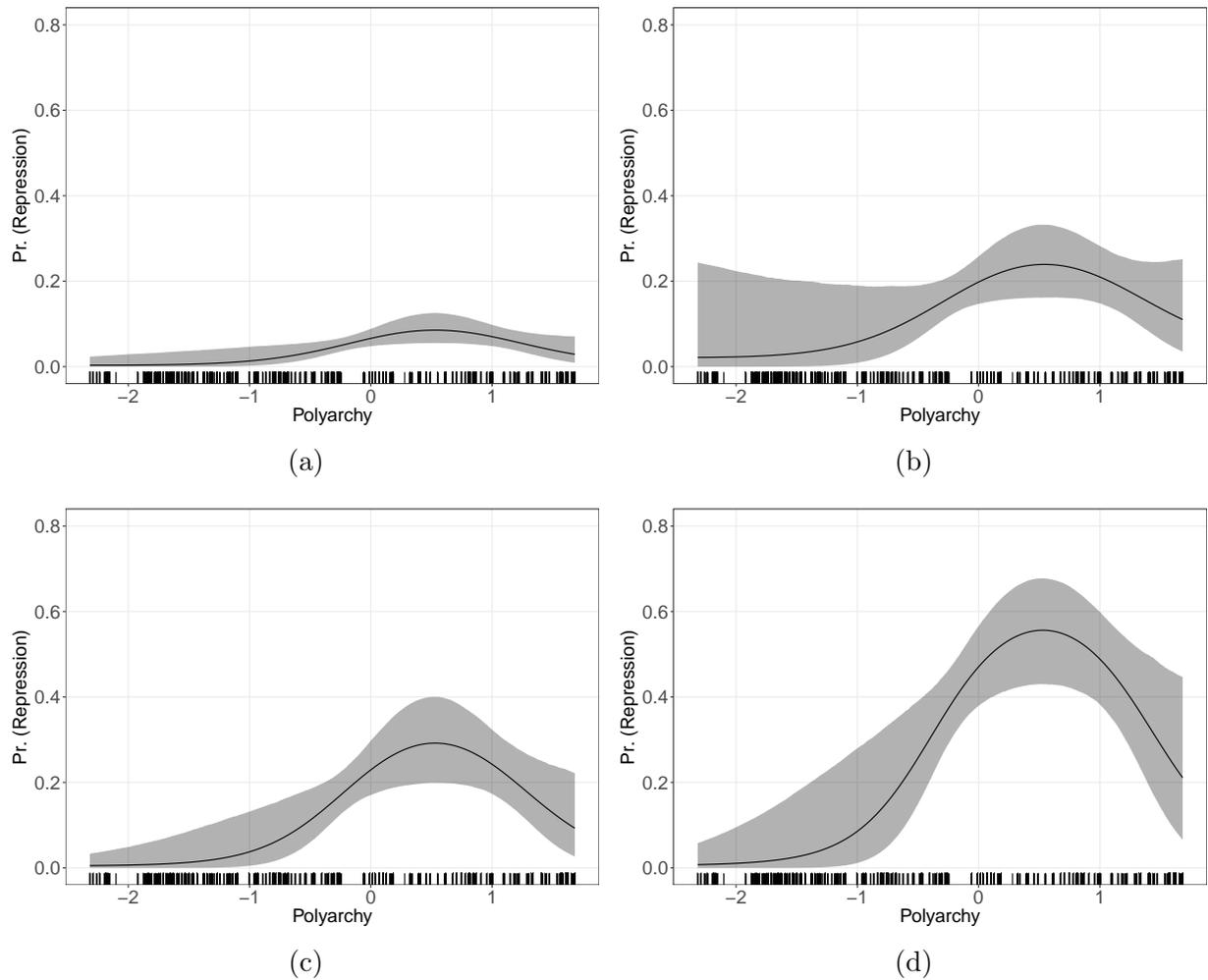
Figure 11: This figure shows the predicted probability of repression as a function the Polyarchy measure in a given country-year. Each plot results from a separate model with an outcome variable (repression) that relies upon a different temporal coding. Panel (a) uses a measure of repression within 5 days, panel (b) 10 days, panel (c) 15 days, and panel (d) 30 days.
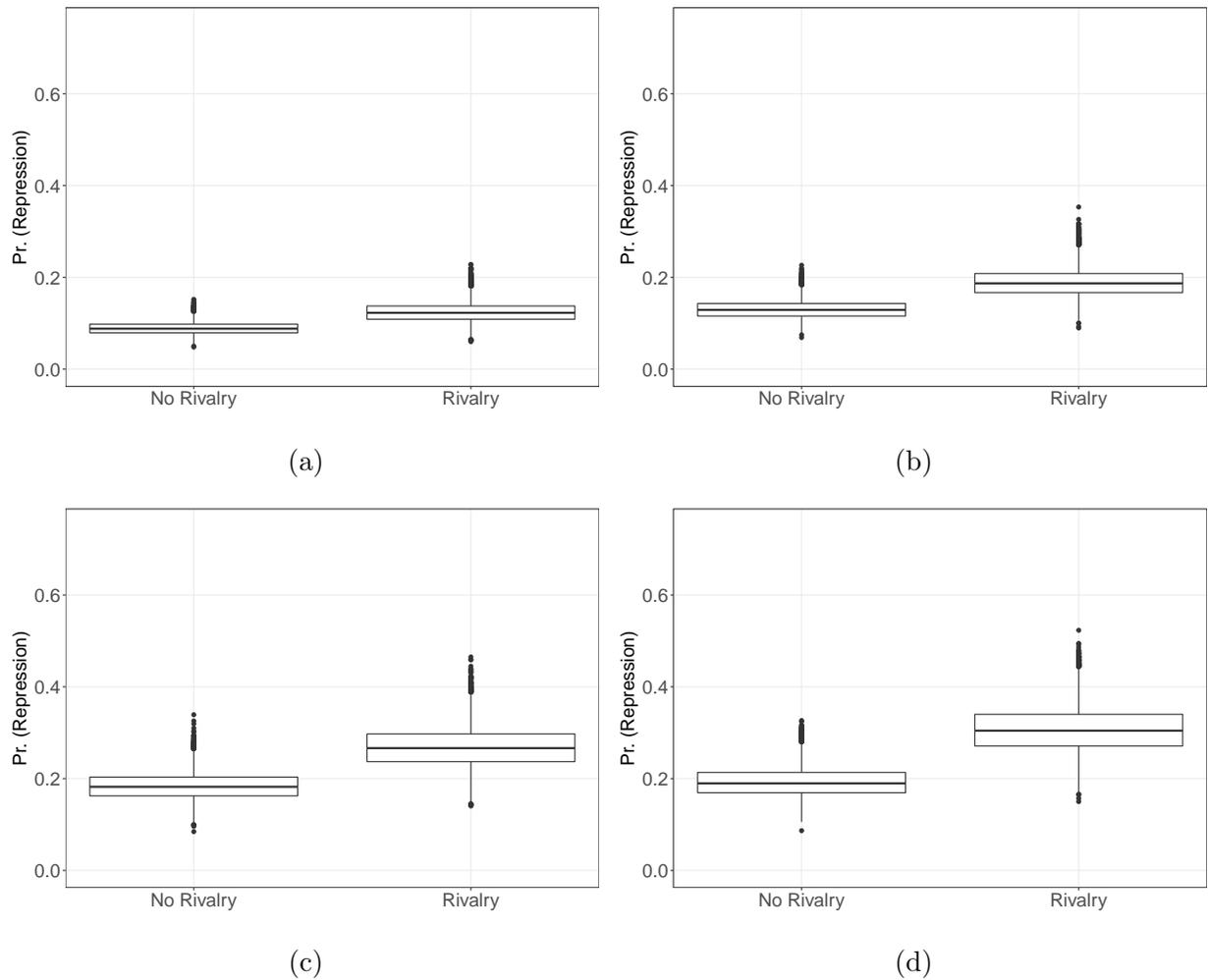
Figure 12: This figure shows the predicted probability of repression as a function of whether a state is engaged in an international territorial rivalry. Each plot results from a separate model with an outcome variable (repression) that relies upon a different spatial coding at the 15 day threshold. Panel (a) uses a measure of repression within 10 km , panel (b) 25 km, panel (c) 50 km days, and panel (d) 75 km.

(a)

(b)

(c)

(d)
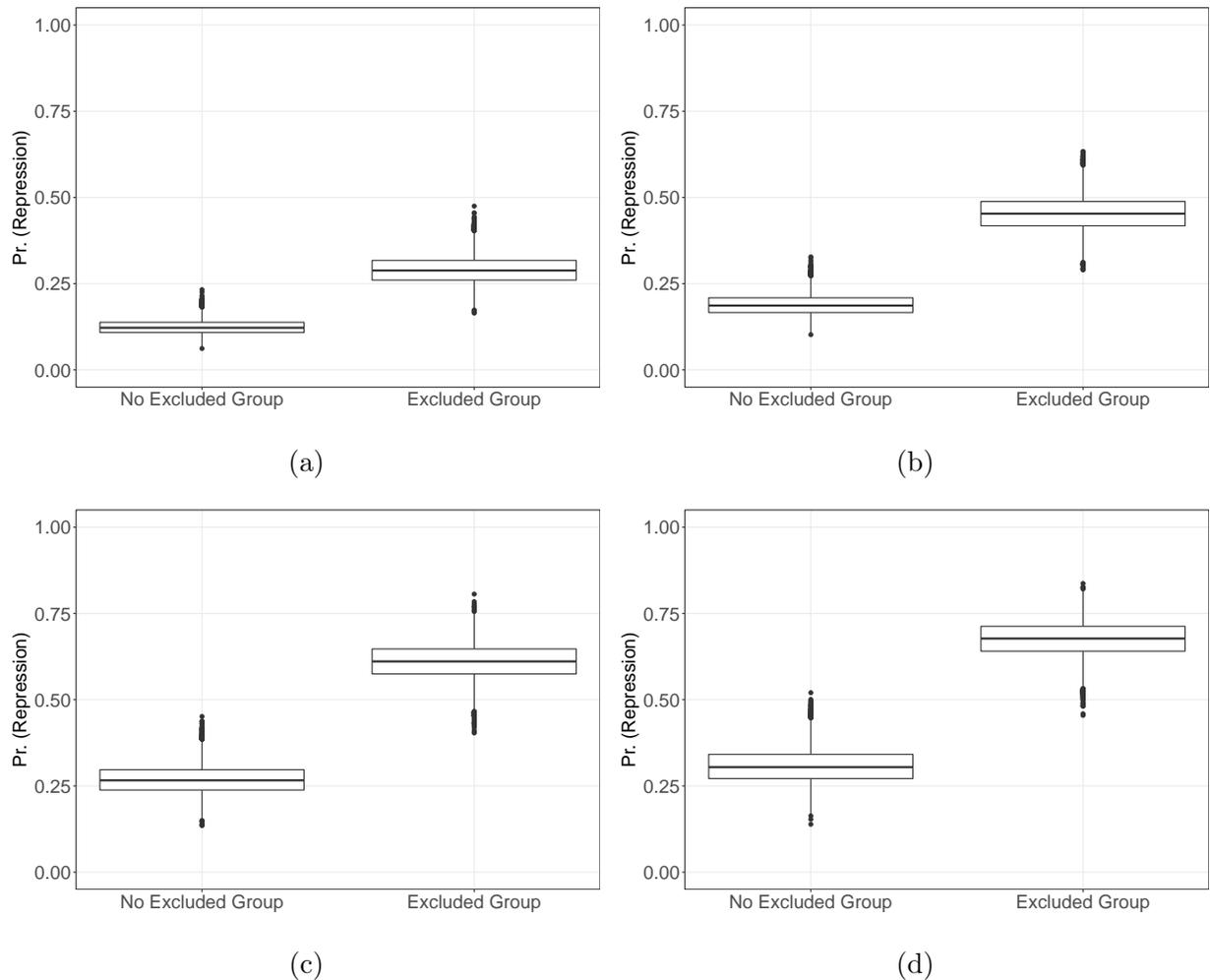
Figure 13: This figure shows the predicted probability of repression as a function of whether an excluded group resides in the area of the attack. Each plot results from a separate model with an outcome variable (repression) that relies upon a different spatial coding at the 15 day threshold. Panel (a) uses a measure of repression within 10 km , panel (b) 25 km, panel (c) 50 km days, and panel (d) 75 km.
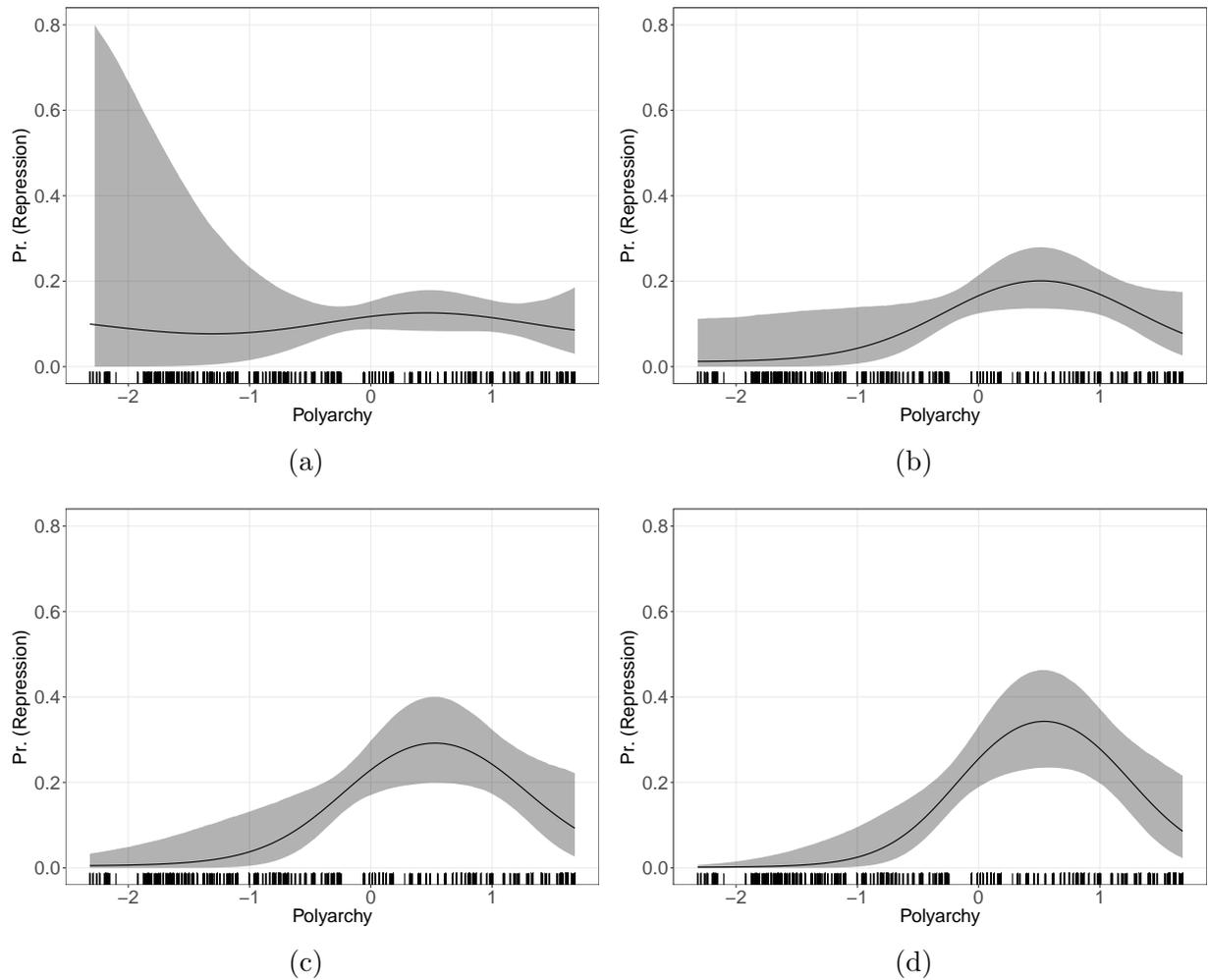
Figure 14: This figure shows the predicted probability of repression as a function the Polyarchy measure in a given country-year. Each plot results from a separate model with an outcome variable (repression) that relies upon a different spatial coding at the 15 day threshold. Panel (a) uses a measure of repression within 10 km , panel (b) 25 km, panel (c) 50 km days, and panel (d) 75 km.