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One strike and you're out!

Dictators' fate in the aftermath of terrorism

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Abstract

We use a cross-country dataset on terrorism and leadership survival from 1970 through 2015 to shed light on a leader's fate after terrorists' strike. We provide robust evidence that incumbents in electoral authoritarian regimes face an increased hazard of exit from political power. This is contrasted with the closed authoritarian dictators that remain intact. Moreover, we fail to find a robust effect of terrorism on a leader's survival probability in democracies. We conceive this effect to be due to the collapse of the elite coalition in autocracies after an attack, suggesting that the Dictator's "loyal friends" betray him in the aftermath of terrorism.

Keywords: Terrorism · Political Survival · Incumbent Leaders · Electoral Autocracies · Closed Autocracies

1. Introduction

The political survival of an incumbent depends on various factors, such as economic performance, size of the ruling coalition, institutions, etc. (Bueno de Mesquita, 2005). Even though some of these factors depend and are determined on the leader's actions, others are purely exogenous. In this paper, we examine one such factor, namely the effect of a security threat in the form of a terrorist attack on the risk that leaders face of being disposed of.

Undeniably, terrorism poses a major security threat that may dramatically undermine the state's ability to efficiently provide public goods and signals low incumbent competence (Gassebner, 2011). Thus, at least when it comes to democracies, terrorism finds resonance with voters and candidates alike being the main topic in political agenda (e.g. the 9/11 2004 US attacks) or could even override electoral outcomes (e.g. the 11/03 2004 Madrid bombings). And even though anecdotal evidence about the effect of terrorist attacks on the political landscape abounds, the effect of terrorism on political turnover in non-democracies is less examined. To the best of our knowledge, the only paper that examines the impact of terrorism on incumbents' survival depending on the political regime is that of Park and Bali (2017).

Our analysis differs from previous contributions as it explicitly takes into account the type of the authoritarian regimes. Specifically, our analysis distinguishes between electoral and closed authoritarian regimes, where the former are characterized by

inclusiveness, i.e. regular elections for both executive and legislative offices, and minimal competition, i.e. opposition is allowed, multiple parties are legal, and more than one candidate is allowed on the ballot, but with elections that are not free and fair (Schedler, 2009; Hyde and Marinov, 2012; Nurmikko-Metsola, 2020). Following this dichotomy, we find that electoral authoritarian leaders are prone to be overthrown in the aftermath of terrorism. This stands in sharp contrast to closed authoritarian regimes, where the hazard of losing office is not affected, and democratic regimes where there appears that terrorist attacks, at least international attacks, tend to stabilize the incumbent by generating a “rally around the flag” type effect (e.g. Brody and Page, 1975; Hetherington and Nelson, 2003; Chenoweth, 2010; Chowanietz, 2011; Park and Bali, 2017; Kuehnhanss et al., 2020).

In our analysis, we rely on a panel dataset of 1.115 different political leaders from 163 countries all over the world, over the period 1970-2015. Our dependent variable is incumbents' tenure in political office, as in *Archigos* dataset (Goemans et al., 2009), which provides details about leader characteristics, the year they took office, the year they lost office as well as the way they were discharged. Our main variable of interest, i.e. the total number of terrorist attacks, is taken from the Global Terrorism Database (GTD) (START, 2018). For the countries and years in our sample, this database shows that there were 151.902 terrorist episodes, which killed over 343.111 people in total. Since our main interest rests

on identifying differences across regime types, i.e. democracies, electoral autocracies, and closed autocracies, we utilize the Authoritarian Regimes Dataset (Wahman et al., 2013) and we employ the classification of regimes as in Knutsen et al., (2017).

Our empirical strategy is to estimate a Cox Proportional Hazards Regression Model (Cox, 1972), which assumes that the covariates multiplicatively shift the baseline hazard function. Then, we allow this shift in the hazard function due to terrorist attacks to be different across the three political regime types (i.e. democracies, electoral autocracies, and closed autocracies). According to the theoretical priors, that are set out in section 2, we find that incumbents in authoritarian regimes face an increased hazard of exit political office, compared to the effect on democrats when terrorists strike. Yet, further penetrating into authoritarian settings, electoral authoritarian leaders are prone to be overthrown in the aftermath of terrorism.

To examine the robustness of our results, among other robustness tests we also employ a parametric GMM Poisson regression. Besides providing additional supportive evidence, this exercise allows us to address issues of endogeneity by performing an instrumental variable analysis. As an instrument, we use the total number of terrorist episodes in contiguous states (see also Braithwaite and Li, 2007; Krieger and Meierrieks, 2011). To our understanding, this is a valid instrument as it has a high correlation with the endogenous variable, i.e. number of terrorist attacks in the respective country, and

additionally, it does not appear theoretical to affect the survival of the incumbent through other channels. The instrumental variables Poisson regression, then, provides additional support evidence in favor of our main hypotheses.

The rest of the paper is organized as follows. Section 2 discusses our theoretical arguments and spells out the main testable hypotheses. Section 3 describes the data and introduces the empirical specification. Section 4 presents the main empirical results while section 5 introduces the sensitivity analysis of our estimations. Finally, in Section 6 we provide some concluding remarks.

2. Theoretical Framework

Terrorism poses a major security threat that dramatically undermines the efficient provision of public goods, and, most importantly, national and domestic security (Park and Bali, 2017; Ezcurra, 2019). A part of the literature (Gassebner, 2011; Ashworth, 2012; Park and Bali, 2017) has emphasized that terrorist attacks act as a signal about incumbents' competence. According to this view, terrorist incidents endanger incumbents' survival as they bring forward governance inefficiencies. Hence, after a terrorist attack, the incumbent might appear less powerful in the eyes of the citizenry, giving prominence to accountability threats, either from regime outsiders or from threats within the regime.

A part of the literature that examines the factors that affect incumbent's survival, has found that external conflicts have a

different effect across democracies and autocracies (e.g. Bueno de Mesquita et al., 2005; Chiozza and Goemans 2004; Debs and Goemans, 2010). This differentiation is based on the idea that democratic leaders face greater accountability and, hence, face a higher audience cost than the autocrats. Based on this observation, Park and Bali (2017) examined the impact of terrorism on incumbents' survival depending on the political regime type. Their findings indicate that international terrorist attacks increase the hazard of exit for autocratic leaders. In contrast, the democrats are relatively immune to the effect of terrorist attacks.

The main idea behind this result rests on the fact that there is a higher affinity between the people and the leader in democracies rather than in autocracies (Park and Bali, 2017). Participation in the decision-making process, higher institutional constraints, and the fact that in democracies international terrorist attacks appear to the eyes of the people as exogenous to the regime, and more as a national problem, make democrats less vulnerable than autocrats (Choi, 2010; Park and Bali, 2017). All the above, suggest that democracies might, in fact, experience a rally 'round the flag effect (e.g. Brody and Page, 1975; Hetherington and Nelson, 2003; Chenoweth, 2010; Chowanietz, 2011; Kuehnhanss et al., 2020), i.e. a stabilizing effect of terrorism on democratically elected leaders.

At the same time, in democracies, there is high respect for civil liberties, in contrast to autocracies where oppression is the rule rather than the exception. Further, constitutional constraints limit

the ability of democratic leaders to increase repression (Choi, 2010; Park and Bali, 2017). And, as there is a trade-off between civil liberties and security (Davis, 2007; Park and Bali, 2017), people in democracies are more sensitive in accepting policies that increase security at the expense of fewer liberties. In contrast, in autocracies, there are no external constraints on the leader in repressing civil liberties. At the same time, pre-existing human rights repression makes further in civil liberties worsening possible, as the regime has already created conditions which foster repression.

These arguments, then suggest that terrorist attacks have two opposing effects on a democratic leader's popularity and thus survival probability: a rally 'round the flag effect increases leader's popularity, whereas higher repression have the exact opposite effect. Thus overall, the effect on a leader's survival depends on the relative strength of the two effects suggesting that after a terrorist attack the probability of leader survival may increase, decrease or both effects cancel out creating a zero effect.

However, the above arguments cannot be easily generalized to imply a common effect across autocracies. In fact, some autocratic regimes are hybrid regimes, where elements of democratic and fully autocratic systems co-exist. Then, we can categorize authoritarian regimes in electoral autocracies and closed autocracies.

Electoral autocracies are hybrid political regimes, where parties, elections, and legislatures act as power-sharing devices with the

dictators' ruling coalition (Schedler, 2009). Referring to electoral authoritarian regimes' institutional features, electoral autocracies are broadly inclusive, i.e. regular elections for both executive and legislative offices are held under universal suffrage, and minimally competitive, i.e. opposition is allowed, multiple parties are legal, and more than one candidate is allowed on the ballot (Hyde and Marinov, 2012). Inclusiveness and minimal competition differentiate closed to electoral authoritarian regimes, while free and fair elections differentiate the latter from democracies (Schedler, 2002). Closed autocracies, at the same time, are typically personalistic regimes, where, in the spirit of Wintrobe (1998), there is high repression but also increased loyalty towards the leader.

Taking these into consideration, we should expect terrorism to produce different effects on incumbent survival in electoral and closed autocracies, due to the presence or absence of elections. This stands in sharp contrast to democracies, where elections legitimize the government's/leaders' actions, hence stabilizing the regime after an attack, creating the rally 'round the flag effect. On the other end stand closed autocracies, where the affinity of the people to the leader is derived by the loyalty or the fear of the population.

In the hybrid case of electoral autocracies, when terrorists strike, the power of the regime supporters is in dispute. And since supporters are a compact group, with a common interest to retain political power, this group's preferences determine whether incumbent dictators are going to be held accountable and their fate in the

political arena. This compact, well-informed, and common-interest group possesses strong incentives to hold political power. This facilitates their coordination effort to replace the incompetent leader to retain their status within the regime. In other words, in an electoral autocracy, the dictator's "loyal friends" may easily betray him in the aftermath of terrorism. The reneging of the power-sharing agreement is what drives to the collapse of elite coalitions from within when terrorists strike electoral autocracies. Of course, such forces are not present in closed authoritarian regimes, where there is no power-sharing device for the ruling coalition, and the regime is closely tied to the incumbent.

But the presence of elections is not the only thing that differentiates closed and electoral autocracies. The degree of repression across the two regime-types is different. Electoral autocracies are minimally open, i.e. opposition parties face repression in selective and intermittent ways (Bogaards, 2009). In contrast, repression in closed autocracies is massive and extensive. Then, the latter regime, cannot respond to terrorist attacks by further reducing liberties. In contrast, in less repressive electoral autocracies, where at least some minimal civil and political liberties are respected, the dictator may be tempted to try to take advantage of the security-civil liberties trade-off to deal with terrorism. Of course, even in autocracies, this hurts a leader's popularity thus creating forces willing to overthrow the leader, or even overthrow the regime. Then, in this case as well, incumbents in

electoral autocracies face a higher hazard of exit. But this time, it is not the betrayal by the loyal friends, but their own mistaken policy.

Both effects above, then, work towards the same direction. In electoral autocracies, the regime's ruling coalition can easily dispose of the leader, to remain in power. At the same time, the regime can increase the level of repression above the initial minimal level, and extent it to more segments of the opposition. In contrast, in closed autocracies, the regime is closely tied to the incumbent and further increase in repression, in response to the terrorist attacks, is not possible. This results in the following two hypotheses.

Hypothesis 1: *In the aftermath of terrorism, incumbent leaders in democracies face a reduced hazard of exit political power compared to their authoritarian counterparts.*

Hypothesis 2: *In the aftermath of terrorism, incumbent leaders in electoral authoritarian regimes face an increased hazard of exit political power, while their closed authoritarian counterparts remain intact.*

In the following section, we examine the empirical validity of these two hypotheses, and we further examine their robustness across various specifications.

3. Data

To test the above, we use *survival analysis* to analyze the time to the occurrence of an event (Cleves et al., 2008). Survival models have a time-to-event approach, where time is the incumbent's tenure and the event is the exit from office. The survival function gives, for every time, the probability of holding political office up to that time. The hazard function $h(t)$, also known as the conditional failure rate, is the limiting probability that the failure event occurs in a given interval, conditional upon the subject having survived to the beginning of that interval, divide by the width of the interval (Cleves et al., 2008).

Here we use the Cox Proportional Hazards Regression Model (Cox, 1972), which assumes that the covariates multiplicatively shift the baseline hazard function. The Cox model is expressed by the following hazard function:

$$h(t) = h_0(t) * \exp(b_1x_1+b_2x_2+\dots+b_px_p)$$

where t represents the survival time, $h(t)$ is the hazard function determined by a set of p covariates (x_1, x_2, \dots, x_p) . The coefficients (b_1, b_2, \dots, b_p) measure the impact of covariates, and h_0 stands for the baseline hazard.

If we use a simple Cox proportional hazard model, and calculating the Proportional Hazard test, indicates that the model always rejects the null of proportional hazards. Calculating the test for each variable separately indicates that the source of rejection of the assumption for the whole model is due to the age variable and the

interaction of age and regime type. As the age variable is crucial for our analysis, and always included in the relevant literature (Bueno de Mesquita et al., 2005), we have followed Kleinbaum and Klein (2012) and estimated a Cox model stratified for the *age_group*regime* variable.

3.1. Key variables

To determine the time of entry and exit of each leader, we employ the *Archigos* dataset (Goemans et al, 2009). *Archigos* identifies the effective leader, i.e., the person who de facto exercises power in a country, of each independent state (Gleditsch and Ward, 1999). Additionally, in the data, we can identify how rulers enter and leave political power, the post-tenure fate of the ruler, as well as other personal characteristics.

The key dependent variable *Tenure*, then, counts the total number of years that the effective leader holds political power, using the *entry* and *exit* dates of *Archigos*. In instances when multiple leadership changes occurred in a state in a given year, we only consider the first change.¹

Concerning our key independent variable, terrorism, we use the Global Terrorism Database (GTD) (START, 2018). The Global Terrorism Database (GTD) includes data on transnational and domestic terrorist

¹ To deal with constitutionally determined term limits, which create censoring in our data, (Chiozza and Goemans, 2003), we construct the indicator *Term Limits*, using information on legislated term limits in the *CIA World Factbook*.

incidents, together with any information regarding each attack, e.g. target type, weapons used, date and location of the attack, number of casualties, and nature of the target, and-when identifiable-the group or individual responsible. Though the GTD refrains from establishing a single definition of terrorism, it describes a terrorist attack as "...the threatened or actual use of illegal force and violence by a non-state actor to attain a political, economic, religious, or social goal through fear, coercion, or intimidation" (START, 2018).

For an event to be included in the GTD database, it must first meet the three following base criteria (START, 2018): first, the incident had to be intentional—the result of a conscious calculation on the part of the perpetrator. Second, it had to entail some level of violence or threat of violence—including property violence, as well as violence against people. Third, the perpetrators of the incidents had to be sub-national actors. The GTD does not include acts of state terrorism.

Additionally, at least two of the following three criteria must be present for an incident to be included in the GTD. First, the act had to be aimed at attaining a political, economic, religious, or social goal. The exclusive pursuit of profit does not satisfy this criterion. Second, there had to be evidence of an intention to coerce, intimidate, or convey some other message to a larger audience (or audiences) than the immediate victims. Third, the action had to be outside the context of legitimate warfare activities, that is, the

act must be outside the parameters permitted by international humanitarian law, insofar as it targets non-combatants.

To specify our key independent variable, we use the GTD data to construct *Attacks* that account for the total number of terrorist incidents per year, in a given state, including international, domestic, and unknown incidents. Following the relevant literature (e.g. Park and Bali, 2017) we use the variable in a logarithmic form, i.e. $\ln(\text{Attack}+1)$. Furthermore, we also decompose the variable *Attacks* in *International Attacks*, which includes only international attacks on any of the logistically, ideologically, and miscellaneous dimensions, and in *Domestic Attacks*. Finally, we create the variable *Unknown Attacks* for all terrorist incidents where incentives or perpetrators remain unidentified.²

To control for regime type, we utilize the Authoritarian Regimes Dataset (ARD) (Wahman et al., 2013), which categorizes regimes as autocratic and democratic by estimating mean cutoff points in five categorical measures of democracy (see Wahman et al., 2013 for more details). To differentiate among electoral and closed autocracies, we follow Knutsen et al., (2017), which codes autocratic regimes to regimes that hold elections (*electoral autocracies*) and regimes that do not hold elections (*closed autocracies*), using information for the existence of national and executive elections from the NELDA dataset

² In the sensitivity analysis, in order to exclude terrorist attacks with a low impact, we also use information provided by *GTD* on the number of total confirmed fatalities for the incident, including all victims and attackers who died as a direct result of the incident.

(Hyde and Marinov, 2012). Hence, our regime type variable has three categories, i.e. electoral autocracies, closed autocracies, and democracies.

3.2. Other independent variables

To correctly specify the hazard model, we also control for a wide set of other factors that also explain the incumbent exit hazard. Thus, we include the variable *Previous Term*, as in Goemans et al. (2009). This variable aggregates the number of previous tenures in office for the political leader, prior to its current tenure. There are several reasons to expect that the probability of a leader losing power in any given period is associated with his previous term (Bienen and Van de Walle, 1989; 1992): constitutional term limits, "incumbency fatigue" and gradual loss of popularity may all suggest that previous terms result into higher exit probability. At the same time, the previous term in office may capture independently measured variables (e.g. Chiozza and Goemans, 2003), such as skills, or leaders' ability to build political networks and to acquire and use information, thus we may also find that the risk of losing power decreases throughout leaders' tenure.

Further, we also include a series of economic factors that is expected to affect leaders' political survival (Lewis-Beck and Stegmaier, 2000; Burke, 2012; Choi, 2015). First, we use the annual growth rate of real *GDP per capita* (denoted as *GDP per capita growth*), taken from The World Bank's World Development Indicators. We expect that the electorate, voters and elites, will punish or reward their

leaders for negative or positive economic outcomes. It seems reasonable to expect that that higher GDP growth rate increases the likelihood of an increased tenure for a political leader, across all polities (Choi, 2015).

As an additional control variable, we include the dummy variable *Economic Sanctions* (Marinov, 2005; Escribà-Folch and Wright, 2010; Hayes and Cavazos, 2015), which takes the values of as 1 if a country was targeted by economic sanctions in a given year, and 0 otherwise. The variable is taken from Park and Bali (2017) and is compiled based on Morgan et al. (2014). Foreign policy pressure in any form may affect incumbents' tenure in office, by destabilizing them, since economic sanctions may substantially affect the welfare of the population and also reduce the rents from being in office for the autocrat (Cho, 2019).

To measure the military power of the country, we make use of the Composite Indicator of National Capability (CINC) (Singer et al., 1972), based on the following annual values for the total population, urban population, iron and steel production, energy consumption, military personnel, and military expenditure of all state members to control for the national capability of a given state. As national power increases, leaders must be insulated from the dangers of exiting political office.

Furthermore, we control for the degree of the repressiveness of the regime by including a variable that captures the violations of physical integrity rights- i.e. variable *Political Terror Scale*

(Gibney et al., 2019). Political terror is defined as violations of basic human rights to the physical integrity of the person by agents of the state within the territorial boundaries of the state. Political terror is measured on a 5-point ordinal scale, where 5 indicates the maximum of the highest level of political terror and a score of 1 the minimum. The sign of the variable is a priori ambiguous, since the absence of respect for these rights may either harm the leader, by reducing the loyalty of the population or benefit the leader by suppressing the opposition.

According to the literature that examines the significance of armed conflict on a leader's ability to hold office (e.g. Bueno de Mesquita et al., 2005; Croco, 2011), we create indicator variables for the occurrence of *Intra-State Wars* and *Inter-State Wars* in a given country and year, as well as indicator variables for War Outcomes, i.e. *win*, *loss*, or *draw*, based on the classification of the Correlates of War Project (Sarkees et al., 2010). Always according to the related literature, we expect that authoritarian political leaders have a longer duration in office than leaders who govern democratic states, when initiating in an armed conflict, due to their reduced accountability to the public.

As even the best governance and policies will not work in a country with political instability (Mehmood and Mehmood, 2016), we include the dummy variable which takes the value of 1 when a country experiences instability in the system of governance, and zero otherwise (as taken from Fearon and Laitin, 2003 and extended by

Slettebak, 2012). Prior instability is expected to exert a negative effect on incumbents' tenure in the political arena.

Last, we control for the degree of religious heterogeneity within a state. Fractionalization has long been hypothesized to be correlated with coups (Miller and Elgün, 2011), although arguments are at times contradictory (Jackman, 1978; Lake, 1955). We expect that heterogeneous societies face an increased likelihood that a domestic group will use extraconstitutional means to acquire power. Religious fractionalization is taken from Fearon and Laitin (2003), which use the ethnolinguistic fractionalization index from the Atlas Narodov Mira (1964). The data are extended by Slettebak (2012). The variable measures the probability that two people from the population chosen at random will be from different religious groups.

Our final dataset includes data on 163 countries from 1970 through 2015. In total, 1.115 different political leaders are included in this analysis. According to our data, Fidel Castro, in Cuba, has the longest tenure in our analysis, spanning for half a century. He is followed by Hussein Ibn Talal El-Hashim in Jordan and Kim Il-Sung in North Korea for 47 and 46 years respectively.

Regarding terrorist attacks, we have information on 151.902 incidents over these 45 years. Iraq in 2014 stands out, having 3.933 terrorist incidents which killed 13.965 people, from which the 1.118 were international, the 35 were domestic and the rest 2.780 have been classified as unknown terrorist incidents.

4. Empirical Results

The following table presents our baseline results.

[Insert Table 1, here]

In the first column, the interaction of the (logarithm of) total number of terrorist attacks with the indicator of autocracy, controlling for a wide set of other factors indicates that the positive effect of the total number of terrorist attacks on the probability of exit of the incumbent holds only in autocratic countries. This is consistent with our first hypothesis, i.e. that terrorist attacks affect the tenure of democrats less than that of autocrats.

As the coefficient of the interaction term represents a deviation from the baseline value, i.e. democracies, and as the coefficients from the Cox analysis do not have a clear interpretation (Cleves et al., 2008), at the bottom of the table, we also report the total combined effect on autocracies and democracies as hazard ratios. This effect suggests that *ceteris paribus*, after a terrorist attack the hazard of exit for the incumbent is approximately 24% higher in autocracies than in autocracies that do not experience a terrorist attack. The corresponding figure for a democratic leader is approximately 3%, which is, however, statistically insignificant.

Even though column (1) is the starting point of our analysis, similarly stands column (2) for hypothesis 2, whereas our main

specification is in Column (3). There, besides differentiating between democracies and autocracies, we also examine the different effects of terrorist attacks in electoral and closed autocracies. According to our findings electoral autocracies appear to exhibit a different effect compared to closed autocracies and democracies. At the bottom of the table, when we examine the combined effects on the hazard of exit, we find that for closed autocracies and democracies the effect is statistically insignificant. On the other hand, in electoral autocracies terrorist attacks increase the hazard of exit political power. These results provide evidence in favor of our two hypotheses.³

The figures that follow present the Kaplan- Meier Survivor Functions for Democracies, Electoral Autocracies, and Closed Autocracies respectively. The graphs present the percentage of leaders that have not experienced the exit of political power for each value of the x-axis. The continuous line corresponds to leaders that have not experienced an attack, whereas the dashed line corresponds to the overall survival of those leaders who have experienced a terrorist episode. Using the data from the figures we find that the average year of exit is 14.07 years. Then, about 62% of democratic leaders that experienced an attack reach that time, whereas the corresponding figure for democratic leaders that have not

³ For our main model, in Column (3), Table 1, we test the proportional hazards assumption, using the Schoenfeld and scaled Schoenfeld residuals (see graph A1 in the appendix). Indeed, according to the PH-test, the covariates multiplicatively shift the hazard function.

experienced a terrorist attack is about 75%. Similarly, about 96% of the leaders in electoral autocracies survive up to 14.07 if they do not experience a terrorist attack and about 88% if they do. For leaders in closed autocracies, the effect is not statistically significant, as it is also evident in the related figure where the two lines are very close to each other.

[Insert Figure 1 to 3, here]

Regarding the rest of the control variables, according to Column (3), we find first, previous terms in office are associated with an (close to 33%) increased hazard of exit from political power for the incumbent as the number of previous terms in office increase. This is consistent with the view that suggests that constitutional term limits, "incumbency fatigue" and gradual loss of popularity may all lead to increased exit probability. Furthermore, involvement in an external war is associated with a lower probability of exit, indicating that a "rally around the flag" effect exists. For the GDP per capita growth rate, we find that better economic outcomes, i.e. higher growth rates, exert a stabilizing effect of the leader. On the other hand, economic sanctions and higher state repression increase the hazard of exit for the leader. Finally, in contrast to our priors, higher material capabilities increase the hazard of replacement for the leader, while religious fractionalization decreases the hazard of exit political power. The rest of the variables turn out statistically non-significant, at least at the conventional 10% level of statistical significance.

In the rest of the columns of Table 1, we experiment with additional controls. In column (4), we control for prior instability in the system of governance (Mehmood and Mehmood, 2016). Then, in Column (5), we exclude cases where the leader was expelled due to a regime transition. This allows us to examine whether the effect is driven by the fragile institutional form of the electoral autocracies, which balances between pure democracy and autocracy. Thus, we keep only the cases where the leader was replaced by another leader within the same type of political regime, which is, of course, a premise of our theoretical hypothesis. The overall picture remains the same, validating our main hypotheses.^{4,5}

In the tables that follow we provide further sensitivity analysis. First, in Table 2 we decompose terrorist incidents, in international and domestic attacks, using the classification of GTD.

[Insert Table 2, here]

In Column (1), we present the results only when we examine the effect of international terrorist episodes, whereas in column (2) we examine the effect of domestic terrorist attacks. According to the estimated effects, international terrorist attacks have a stabilizing effect on democratically elected leaders. This result further validates a vast literature (e.g. Brody and Page, 1975; Hetherington

⁴ We have also added additional variables that account for loyalty and repression in our baseline equation. After controlling for these factors, as also suggested by our theoretical priors, the resulting effect of terrorism in electoral autocracies decreases significantly. The results are available from the authors upon request.

⁵ The validity of Table 1 is also tested using the alternative measure of terrorist incidents by Enders et al., 2011, as updated in Gaibullov and Sandler, 2019. The results are available from the authors upon request.

and Nelson, 2003; Chenoweth, 2010; Chowanietz, 2011; Park and Bali, 2017; Kuehnhanss et al., 2020) which shows that democratically elected leaders experience the "rally round the flag effect". In democracies, civilians perceive international terrorist incidents as external challenges against their society and its values by outside non-state actors. Thus, international attacks induce patriotism and power projection, aspects that tend to balance out the respective destabilizing effect for autocrats. Rather than blaming leaders, citizens seem willing to sacrifice their liberties in exchange for security against heightened terrorist threats (Davis, 2007; Park and Bali, 2017). By projecting charisma and capabilities onto their incumbent (Berinsky 2009; Merolla and Zechmeister, 2009; Park and Bali, 2017), people rally around their elected leaders and anticipate incumbents to effectively counter-terrorism. This is in sharp contrast with electoral authoritarian leaders who are vulnerable to international terrorist episodes.

However, when it comes to domestic terrorist attacks electoral authoritarian incumbents face increased hazard of exit political power, indicating that domestic terrorist episodes are indeed a triggering effect for a reshuffling coup (Aksoy et al., 2015). Again, as the estimated hazard ratio reveals, closed authoritarian leaders remain intact and the same holds for the democratically elected leaders. The latter effect might appear puzzling, however, it might be attributed to the lowest occurrence of domestic terrorist attacks in democracies: in democracies, the existence of checks and balances

credibly constrains leaders from abusing their power (Findley and Young, 2011). Similarly, in democracies, the opposition can be expressed by non-violent means. Furthermore, according to Bali and Park (2014), in democracies there is a reduced incidence of international terrorist events in times of elections, since potential rally effects and armed retaliation may act as a strong deterrent for nondomestic groups who strategically seek to avoid these two effects. Further, at election times, democracies may attract fewer transnational incidents, due to their reduced tendencies toward high levels of international involvement during that period (Bali and Park, 2014). These effects suggest that in democracies (domestic) terrorism is not a form of political expression. Of course, this does not hold in autocracies. Thus, the result regarding electoral autocrats is consistent with our hypothesis: terrorism induced by domestic actors prompts criticism in the electoral authoritarian setting motivating supporter regime elites to protect the regime, but not the incumbent leader.

In the rest of the columns in Table 2, to examine whether our results are driven by the way we decompose total attacks into international and domestic incidents, we also employ the database of Enders, et al. (2011), as updated by Gaibulloev and Sandler (2019), which build a database that decomposes total attacks into transnational and domestic incidents by applying a five-step procedure. As the reader can verify, both methods of decomposing terrorist incidents produce qualitatively similar results.

Table 3 provides additional robustness tests.⁶ In Columns (1) and (2), we exclude those countries that experienced either a very low or a very high number of attacks. Thus, we exclude 5%- Column (1) and the 5% most attacked countries of the less attacked countries in our dataset.⁷ Likewise, in Columns (3) and (4) we exclude the 5% of the countries that experienced the most fatalities, and the 5% of the countries that experienced the least fatalities, respectively. Finally, in columns (5) we exclude those countries that did not experience any fatalities. The thrust of our main argument remains.

[Insert Table 3, here]

Following recent work by Bueno de Mesquita and Smith (2018), in small coalition political systems the expectation that an incumbent will die soon, and so not be able to deliver future private rewards to his coalition of supporters, significantly increases the likelihood that the leader will be overthrown. Thus, such cases may be a driving force of our results: terrorist attacks are not the cause of a change in the leader, rather they coincided with a change of an ailing leader. Or, an issue we will also try to deal with in the following section as well, terrorist attacks are targeted to weak leaders. Hence, in Column (6), Table 3, we exclude instances when leaders retired due to ill health, using data on health status on

⁶ For the clarity of the analysis we do not present the results for all variables, but only the main variables of interest. The complete set of results are available upon request.

⁷ The former are Equatorial Guinea, Costa Rica, Mongolia, North Korea, Yemen People's Republic, Oman, Republic of Vietnam and Turkmenistan, whereas the latter are Iraq, Pakistan, Afghanistan Colombia, Peru, India, Philippines, and United Kingdom.

exit from Archigos (Goemans et al., 2009). Still, our results hold; these cases do not appear to bias our results.

In Column (7), Table 3, we validate the robustness of our results excluding countries with a high share of natural resources. The existence of natural resources implies that there might be rents to be shared by the leader and the elite. Hence, the elite might have additional incentives to protect the leader after an attack in resource-rich countries. Thus in Column (7), we exclude countries whose sum of revenues from natural resources, specifically oil, gas, coal, and metal revenues (Haber and Menaldo, 2011), surpass the 20% of GDP (IMF, 2012). Our results indicate that our results hold in poor resource countries, thus the potential existence of rents for the elite does not drive our results.

As war may affect tenure, especially in autocratic countries (Chiozza and Goemans, 2004; Debs and Goemans, 2010) and also affect the occurrence of terrorist attacks (Lai, 2007; Piazza, 2008; Campos and Gassebner, 2009; Krieger and Meierrieks, 2011), in Column (8) we exclude countries that have been engaged in *interstate* war. Similarly, in Column (9) we exclude countries that have experienced any *war loss*, while in Column (10) we exclude instances of *prior instability* in the system of governance. Even when we do so, our main results remain the same. Finally, we examine the impact of suicide attacks on incumbent leaders' survival in political arena. To determine terrorist attacks that stem from suicide attacks we use the total number of suicide incidents, we use those cases where there is evidence that the perpetrator did not intend to escape from the attack

alive (START, 2018). The adverse effect of suicide attacks on leader survival is more pronounced compared to the case of all terrorist attacks. More precisely, the odds ratio is 1.902, compared to only 1.277 when we use all attacks. This is consistent with the view that the public may be less sensitive to every day's political violence that doesn't involve suicide attacks.

In the last robustness test, in Table 4, we address issues of endogeneity. There might be several reasons why our results might be deemed biased: first, we cannot rule out the possibility of selection (Park and Bali, 2017; Gaibulloev and Sandler, 2019). Terrorists, as they wish to show a larger impact of their strike, choose among several possible locations the one that appears less able to prevent the attack, i.e. the one with the least powerful leader. Of course, this leader might be eventually be disposed, not because of the attack, but instead because he is inherently weak. Similarly, confounding variables might also create issues of endogeneity. The existence of strong opposition, that has the means to overthrow the leader, might equally explain the change in the incumbent as well as explain the occurrence of domestic attacks that target the regime.

To deal with this issue, we employ an instrumental variable approach. Given the paucity of quality instruments for terror attacks, the challenge in our case is to find a valid instrument that is adequately correlated with terrorism and remain uncorrelated with political survival and the disturbances. To this end, we follow Braithwaite and Li (2007) and employ the total number of terrorist

episodes in contiguous states. Increased terrorist incidents in contiguous states create negative spillover effects into the master country, increasing attacks, through a *contagion effect* (Braithwaite and Li, 2007; Krieger and Meierrieks, 2001). Then, any destabilizing effect from contiguous attacks will affect the hazard of exit only through the channel of the attacks in the master state.⁸

To construct contiguous terrorist attacks, we add the total number of attacks (always from the GTD database) in contiguous states, as determined by the direct contiguity dataset of the Correlates of War Project. Since instrumental variable methods cannot be applied in a regression analysis with censored survival outcomes, here, we will specify a parametric GMM Poisson regression model.

[Insert Table 4, here]

Table 4 presents the instrumental variable approach using the GMM Poisson regression model. Indeed, in Column (1), Table 4 we may observe that when we instrument the number of terrorist attacks with the number of terrorist episodes in contiguous states, we obtain the same qualitative results with our main specification. In column (2) we also include the estimation of our main model using a simple

⁸ One counter argument against our instrument is that terrorist attacks in contiguous states are higher because terrorists can have a haven in the weak neighboring master state. Thus, weak leaders experience more attacks in contiguous states, due to selection. The literature, however, shows that the state's defensive and pro-active policies create a haven for terrorists rather than geographical contiguity (Schneider et al., 2010). And this policy may be due to the inability of a weak leader to control terrorist organization which reside within its territory, or due to holding the same political views of the leader with the terrorist groups. And these states are seldom geographically related to the targeted states (Bahgat and Medina, 2013). Similarly, it could also be the case that over-supply of anti-terrorism diverts terrorist attacks to other targets. But even in this case, there is no evidence that these less protected areas are geographically contingent (Enders and Sandler, 2006).

Poisson model- which by construction gives similar results to the Cox model in Table 1, column (3).

Moreover, according to our results terrorist attacks have no effect on the survival of incumbents in closed autocracies. Finally, in Columns (3) to (6) of Table 4, we replicate the results of Table 1, using the GMM Poisson model with endogenous terrorist attacks. Qualitatively, all results remain the same: terrorist attacks in democracies have a lower effect on the probability of survival of the incumbent. Furthermore, the effect in autocracies is driven by the effect on electoral autocracies.

5. Conclusions

Terrorism does affect targeted incumbents politically in meaningful ways, consisting of an important factor that triggers coups, through various channels. Our empirical results examine differences among electoral, closed autocracies, and democracies. To the best of our knowledge, this is the first study that undertakes such a task, providing a novel distinction regarding incumbent authoritarian leaders' survival in the political arena. This analysis, then, also sheds light on the impact of the quality of governance and institutional coherence on the stability of the political environment when terrorists strike.

According to our findings, it appears that terrorist attacks have destabilizing effects only in electoral autocracies. In contrast, in democracies, it appears that a *rally 'round the flag* effect mitigates the effects creating an insignificant overall effect. The existence of this *rally 'round the flag* effect is more evident when we examine

international terrorist attacks, where it appears that a terrorist attack increases a democratic leader's expected tenure. And since we are dealing with democracies, this outcome can be associated with increased support.

Terrorism is much more than an expression of rage and intends much more than to instill fear and distress. In electoral autocracies, terrorism is a political weapon in terrorist's hands that does work, as long as the ultimate goal of terrorists is to destabilize the leader. And even if our analysis provides evidence in favor of this view, it does not say anything regarding changes in policy. For example, following our analysis, one could examine whether terrorist attacks in electoral autocracies have an effect in changing policies regarding the respect of civil liberties and human rights, or have a long-run positive effect on economic policies and eventually on the economy. This is of course and an avenue for future research, which can extend the results of the present paper.

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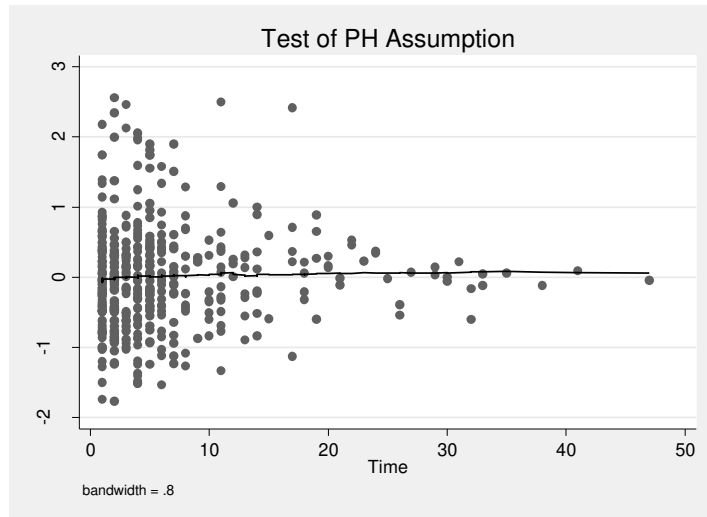
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APPENDIX

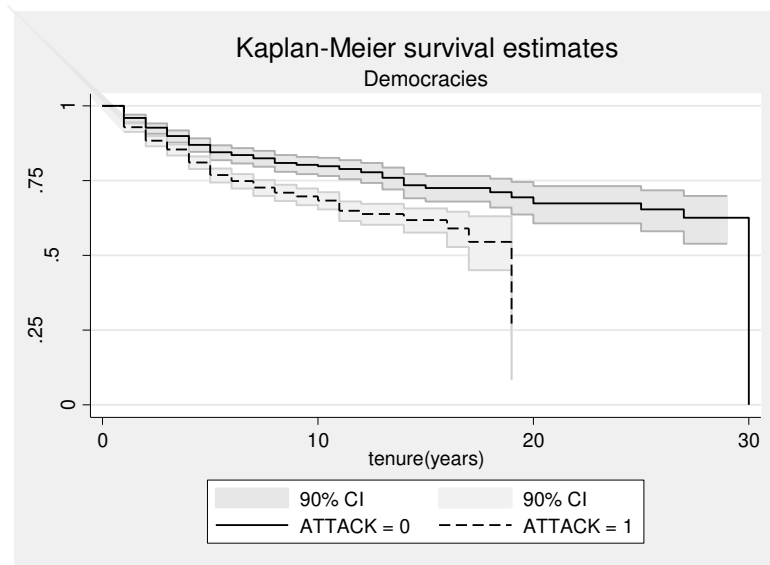
Descriptive Statistics

Variable	Obs	Mean	Std.Dev.	Source
authoritarian regime	6399	0.393	0.488	Knutsen et al., 2017; Hyde and Marinov, 2012
regime type	5019	1.253	0.708	Wahman et al., 2013
tenure	6835	13.413	11.149	Goemans et al., 2009
age	6857	57.949	11.353	Goemans et al., 2009
age group	6857	1.399	0.49	Goemans et al., 2009
exit	6835	0.165	0.371	Goemans et al., 2009
term limits	6789	0.095	0.294	CIA World FactBook
previous terms in office	6858	0.135	0.431	Goemans et al., 2009
attacks	7401	1.008	1.515	START, 2018
international attacks	7401	0.525	0.991	START, 2018
domestic attacks	7401	0.442	1.096	START, 2018
international attacks	6743	0.041	0.801	Gaibullov and Sandler, 2019
domestic attacks	6885	0.704	1.304	Gaibullov and Sandler, 2019
fatalities	3358	1.983	2.073	START, 2018
suicide attacks	3128	0.118	0.502	START, 2018
contiguous attacks	5486	3.175	1.929	START, 2018
political terror scale	5747	2.516	1.143	Gibney et al., 2019
religious fractionalization	5593	0.378	0.218	Fearon and Laitin, 2003; Slettebak, 2012
prior instability	5677	0.131	0.337	Fearon and Laitin, 2003; Slettebak, 2012
GDP growth	6105	1.973	6.74	World Development Indicators
economic sanction	5114	0.227	0.419	Park and Bali, 2017
material capabilities index	6353	0.007	0.021	COW project
resources dependence	5216	6.98	13.865	Haber and Menaldo, 2011
interstate war	5665	0.028	0.165	COW project
intrastate war	5132	0.107	0.309	COW project
war loss	5665	0.004	0.065	COW project

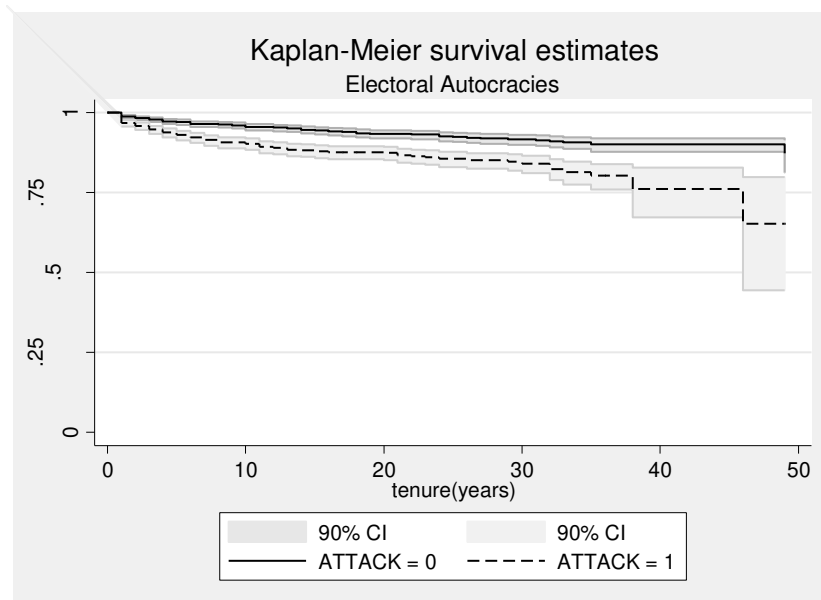


Graph A1 - Test of the proportional hazards assumption using the Schöenfeld and scaled Schöenfeld residuals for Column (2), Table 1

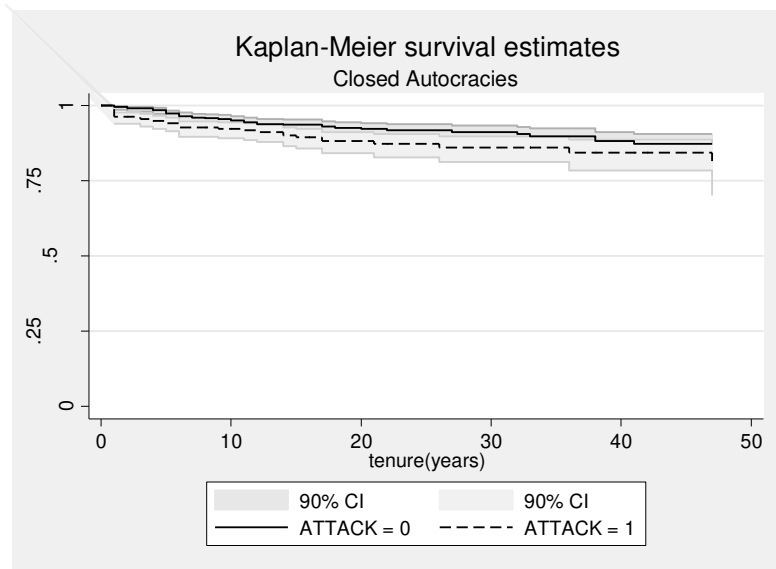
FIGURES AND TABLES



Graph 1 Kaplan-Meier Survivor Function in Democracies.



Graph 2 Kaplan-Meier Survivor Function in Electoral Autocracies.



Graph 3 Kaplan- Meier Survivor Function in Closed Autocracies.

Table 1: Cox Proportional Hazards Regression Model.

	(1)	(2)	(3)	(4)	(5)
Attacks	0.0277 (0.77)	0.0200 (0.54)	0.000845 (0.02)	0.000419 (0.01)	0.00128 (0.03)
Attacks In Autocracy	0.183* (3.52)				
Attacks_in_Closed_Autocracy		0.168 (1.24)	0.190 (1.39)	0.184 (1.34)	0.227+ (1.66)
Attacks_in_Electoral_Autocracy		0.238* (3.64)	0.245* (3.74)	0.233* (3.54)	0.228* (3.16)
Previous Terms in Office	0.377* (4.53)	0.307* (3.20)	0.287* (2.98)	0.280* (2.92)	0.281* (2.85)
GDP Growth	-0.0232* (-3.37)	-0.0338* (-4.55)	-0.0338* (-4.56)	-0.0344* (-4.60)	-0.0359* (-4.65)
Economic Sanctions	0.320* (3.13)	0.363* (3.30)	0.354* (3.22)	0.352* (3.21)	0.346* (3.05)
Material Capabilities index	6.413* (2.35)	8.832* (2.93)	9.590* (3.15)	9.932* (3.26)	9.555* (3.11)
Interstate War	-1.083* (-2.39)	-1.926* (-2.70)	-1.896* (-2.65)	-1.883* (-2.63)	-1.795* (-2.51)
Intrastate War	0.00124 (0.01)	-0.120 (-0.69)	-0.0949 (-0.54)	-0.0913 (-0.52)	-0.163 (-0.87)
Political Terror Scale	0.163* (3.25)	0.194* (3.62)	0.194* (3.60)	0.184* (3.39)	0.205* (3.71)
Religious Fractionalization			-0.428+ (-1.82)	-0.422+ (-1.78)	-0.487* (-2.00)
Prior Instability				0.263+ (1.83)	
<hr/>					
Treatment_effects_across_groups (odd ratios in square brackets)					
Effect on Autocracies	23.52* (4.35) {1.201*}				
Effect on Electoral Autocracies		29.50* (3.81) {1.269*}	27.83* (3.63) {1.277*}	26.23* (3.44) {1.262*}	25.83* (3.03) {1.257*}
Effect on Closed Autocracies		20.72 (1.29) {1.183}	20.99 (1.30) {1.209}	20.22 (1.25) {1.202}	25.66 (1.53) {1.225+}
Effect on Democracies	2.812 (0.76) {1.028}	2.022 (0.54) {1.020}	0.0846 (0.02) {1.001}	0.0419 (0.01) {1.000}	0.128 (0.03) {1.001}
PH chi2 test	8.04	7.36	10.70	11.31	13.55
prob>chi2	0.5296	0.6911	0.4689	0.5021	0.2591
Observations	3132	2822	2819	2819	2719

Notes: All columns present the results of a Cox model estimation stratified by the interaction of age and regime type. PH chi2 test denotes the Proportional hazards test, rejection of the null denotes that the proportional hazards assumption does not hold. Prob>chi2 denotes the probability of rejecting the null hypothesis of proportional hazards. T-statistics in parentheses, odds ratios inside square brackets.+ p < 0.10, * p < 0.05.

Table 2: Cox Proportional Hazards Regression Model.

	(1) International Terrorist Attacks	(2) Domestic Terrorist Attacks	(3) International Terrorist Attacks	(4) Domestic Terrorist Attacks
Attacks	-0.0796 (-1.62)	-0.0186 (-0.37)	-0.123 (-1.61)	-0.0398 (-0.83)
Attacks_in_Closed Autocracy	0.236 (0.76)	0.261 (1.64)	0.0565 (0.14)	0.293* (1.88)
Attacks_in_Electoral_Autocracy	0.356* (3.42)	0.270* (3.57)	0.603* (3.95)	0.298* (3.48)
Religious Fractionalization	-0.533* (-2.30)	-0.464* (-1.97)	-0.644* (-2.48)	-0.591* (-2.25)
Previous Terms in Office	0.283* (2.94)	0.290* (3.00)	0.221+ (1.91)	0.212+ (1.83)
GDP Growth	-0.0326* (-4.45)	-0.0350* (-4.65)	-0.0261* (-2.99)	-0.0275* (-3.03)
Economic Sanctions	0.403* (3.66)	0.346* (3.12)	0.371* (3.12)	0.354* (2.97)
Material Capabilities Index	10.63* (3.57)	10.45* (3.45)	5.550 (1.49)	5.226 (1.38)
Interstate War	-1.926* (-2.69)	-1.834* (-2.57)	-2.417* (-2.40)	-2.314* (-2.30)
Intrastate War	0.0177 (0.10)	-0.0735 (-0.41)	0.0322 (0.17)	0.00180 (0.01)
Political Terror Scale	0.211* (3.99)	0.214* (3.94)	0.242* (4.11)	0.237* (3.91)
Treatment effects across groups (Odds ratios in squarebrackets)				
Effect on Electoral Autocracies	31.84* (2.53) {1.428*}	28.64* (3.37) {1.311*}	61.63* (2.74) {1.827*}	29.45* (2.88) {1.347*}
Effect on Closed Autocracies	16.93 (0.47) {1.266}	27.47 (1.41) {1.299}	-6.402 (-0.17) {1.058}	28.82 (1.49) {1.340*}
Effect on Democracies	-7.655+ (-1.68) {0.923}	-1.844 (-0.38) {0.982}	-11.54+ (-1.71) {0.885}	-3.902 (-0.84) {0.961}
PH chi2 test	14.03	10.42	3.70	4.10
prob>chi2	0.2311	0.4927	0.9780	0.9669
Observations	2819	2819	2315	2315

Notes: See Table 1.

Table 3: Cox Proportional Hazards Regression Model for Robustness Checks.

(Exponential Coefficients)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
	Less Attacked	Most Attacked	Most Fatalities	Least Fatalities	Zero Fatalities	Chronic Illness	Poor-Resources Counties	Interstate War	War Loss	Prior Instability	Suicide attacks
Attacks	0.999 (-0.03)	1.030 (0.67)	1.005 (0.11)	0.991 (-0.23)	1.027 (0.64)	0.996 (-0.11)	0.999 (-0.02)	1.001 (0.01)	1.001 (0.03)	0.992 (-0.20)	0.960 (-0.19)
Attacks_in_Closed_Autocracy	1.183 (1.21)	1.225 (1.46)	1.185 (1.22)	1.195 (1.28)	1.174 (1.20)	1.218 (1.38)	1.216 (1.31)	1.207 (1.37)	1.207 (1.38)	1.010 (0.06)	1.473 (0.43)
Attacks_in_Electoral_Autocracy	1.284* (3.80)	1.235* (2.94)	1.250* (3.07)	1.293* (3.90)	1.231* (3.02)	1.274* (3.67)	1.310* (3.93)	1.260* (3.50)	1.274* (3.69)	1.324* (3.66)	1.902* (1.71)
PH chi2 test	11.77	6.22	6.31	11.45	9.89	11.02	5.60	6.85	15.65	11.56	17.12
Prob>chi2	0.3814	0.8585	0.8522	0.4064	0.5399	0.4419	0.8988	0.7393	0.1546	0.3976	0.1043
Observations	2763	2663	2691	2717	2346	2722	2456	2755	2816	2482	1526

Notes: The table presents the results of a Cox model, only for the main variables of interest. The results for the rest of the variables are available upon request. All coefficients are in odds ratios. See also the notes in Table 1.

Table 4: Parametric GMM Poisson regression model.

	(1)	(2)	(3)	(4)	(5)	(6)
	GMM Poisson	Poisson	GMM Poisson	GMM Poisson	GMM Poisson	GMM Poisson
Attacks	0.140 (1.17)	0.0268 (0.49)	0.148 (1.53)	0.140 (1.46)	0.133 (1.09)	0.143 (1.18)
Attacks in Autocracy			0.424* (2.45)			
Attacks_in_Closed_Autocracy	0.254 (0.49)	0.209 (1.10)		0.251 (0.48)	0.236 (0.46)	0.129 (0.25)
Attacks_in_Electoral_Autocracy	0.485* (1.91)	0.243* (1.82)		0.485* (1.86)	0.501* (2.01)	0.544* (1.86)
Age_Group60*Closed Autocracy	0.776 (1.50)	0.654 (1.02)		0.777 (1.51)	0.810 (1.59)	1.143* (1.99)
Age_Group60**Closed Autocracy	0.0171 (0.02)	0.688 (0.86)		0.0160 (0.02)	-0.0589 (-0.06)	-0.0629 (-0.06)
Age_Group60*Electoral Autocracy	-0.372 (-0.35)	0.706 (0.66)		-0.374 (-0.35)	-0.408 (-0.39)	-0.645 (-0.53)
Age_Group60*Electoral_Autocracy	3.057* (4.03)	2.895* (3.41)		3.051* (4.05)	3.051* (4.10)	3.281* (4.32)
Age_Group60*Democracy	2.912* (3.78)	2.994* (3.97)		2.908* (3.79)	2.912* (3.85)	3.141* (4.09)
Religious Fractionalization	0.00502 (0.01)	-0.358 (-0.84)			0.0228 (0.06)	-0.00101 (-0.00)
Previous Terms in Office	0.304* (3.09)	0.0691 (0.17)	0.390* (4.52)	0.305* (3.20)	0.300* (3.03)	0.298* (3.00)
GDP Growth	-0.0381* (-4.63)	-0.0320* (-3.38)	-0.0272* (-2.80)	-0.0379* (-4.63)	-0.0384* (-4.65)	-0.0402* (-4.63)
Economic Sanctions	0.271* (1.91)	0.387* (2.63)	0.278* (2.29)	0.273* (1.97)	0.275* (1.97)	0.251* (1.84)
Material Capabilities Index	5.629 (1.35)	8.088 (1.27)	5.005 (1.40)	5.648 (1.48)	6.023 (1.43)	6.318 (1.45)
Interstate War	-1.991* (-3.11)	-1.861* (-2.52)	-1.361* (-2.85)	-1.988* (-3.12)	-1.982* (-3.10)	-1.912* (-2.97)
Intrastate War	-0.485 (-1.51)	0.214 (0.62)	-0.385 (-1.64)	-0.484 (-1.58)	-0.497 (-1.52)	-0.625* (-1.80)
Political Terror Scale	0.112 (1.21)	0.121 (1.53)	0.0444 (0.48)	0.112 (1.27)	0.108 (1.21)	0.130 (1.53)
Prior Instability					0.210 (1.13)	
Age_Group60**Autocracy			-0.107 (-0.61)			
Age_Group60*Democracy			2.480* (6.90)			
Age_Group60**Democracy			2.318* (5.99)			
Effect on Autocracies			77.06*			
Effect on Electoral Autocracies	86.78+	30.94*		86.70+	88.47+	98.80
Effect on Closed Autocracies	48.20	26.56		47.81	44.60	31.25
Effect on Democracies	15.01	2.721	15.90	14.99	14.19	15.33
Observations	2256	2828	2488	2259	2256	2175

Notes: See notes in Table 1