International Terrorism and the Political Survival of Leaders

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Abstract

This study examines whether transnational terrorist attacks impact the political survival of leaders. We argue that external security threats, such as those from transnational terrorist incidents, can undermine incumbent target governments by exposing foreign policy failures and damaging society's general well-being. Yet, terrorism may not destabilize democratic governments as a result of citizens rallying around their elected leaders in threatening times. Focusing on Archigos' survival leadership data and International Terrorism: Attributes of Terrorist Events' terrorism data for the 1968–2004 period, we find that autocrats who experience higher instances of transnational terrorist attacks are more likely to exit power. Democrats, however, are relatively secure to the destabilizing influence of transnational terrorism.

Keywords

terrorism, political survival, asymmetric conflict, counterterrorism

Is there any clear, systematic political impact associated with external security events? Despite various efforts to systemize their roles on domestic politics, the evidence from recent empirical studies is often ambiguous, inconsistent, or at best mixed.

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In this study, we examine whether and how an external security threat, in particular transnational terrorism, affects target governments politically. We show that terrorism does have political impacts at least in one critical dimension: it destabilizes the incumbents of target governments. Incumbents are more likely to lose office when their government is a target of frequent terrorist attacks. If terrorists ratchet up the violence—a practice that is potentially dangerous and risky to terrorists themselves—there are likely, whether intended or not, effects associated with these planned actions. Our basic conclusion is that marginalized transnational actors may find terrorism useful to coerce target governments more than recent skeptics propose. Our study has a broader implication in that, unlike war-related variables, the impact of transnational terrorism is, although contingent upon regime type, robust and substantial. Economic growth is the only other variable with robust and substantial impacts.

The next section briefly examines background context. The third section proposes several possible ways international terrorism impacts domestic incumbents. The fourth section provides a discussion of the data and research design. Fifth, we report our results. We then conclude by discussing scholastic and practical implications of our findings.

Background Context

Our research question and findings speak directly to at least two different areas of conflict study: terrorism and incumbent survival literatures. In general, the study of terrorism has thrived since the 9/11 attack and especially in more recent years. Scholars have focused on multiple factors that may cause terrorism, in an effort to better understand the phenomena. Although some examine the effects of terrorism, they tend to look at socioeconomic consequences, such as effects on human health or capital markets, rather than political consequences more directly related to terrorists' original goals (e.g., Schlenger et al. 2002; Blomberg, Hess, and Weerapana 2004; Gaibulloev and Sandler 2011).

A recent exception exists. Abrahms (2006, 2012) has found that foreign terrorist campaigns involving civilian fatalities are rarely successful in coercing target governments to make political concessions. He concludes that terrorism is politically an ineffective means of coercion. This conclusion, however, generates three additional puzzles. First, how should one measure "success" and "failure"? Many terrorist incidents occur without any proclaimed agendas or equally important, without a claim of authorship (A. Hoffman 2010). Even overtly proclaimed agendas can differ from terrorists' true motivations. For example, while The Revolutionary Armed Forces of Colombia's (FARC) long-standing foundational goals and claims in Colombia have been related to an agrarian revolution and the establishment of a Communist government, by now its true motivations may arguably get closer to territorial domination and criminal enterprise enrichment. Second, why do terrorists continue to use terrorism if it is "inherently unprofitable" (Abrahms 2012, 367),

given their objectives? Though their frequency declined after the Cold War, terrorist acts have not declined since the "War on Terror" and private parties have become a more common target (Enders and Sandler 2005; Brandt and Sandler 2010). Third, most transnational incidents have not involved civilian casualties according to International Terrorism: Attributes of Terrorist Events (ITERATE), the most used and comprehensive data for international terrorism. Compared to dramatic terrorist events with casualties, persistent but nonlethal terrorist campaigns may still demoralize the public, without the countervailing tendencies to rally around the leader.

Focusing on two basic assumptions of rational actors, one about terrorists and the other about incumbents, can provide useful insights. Terrorism is commonly defined as the deliberate threat of violence by (generally weak) nonstate actors to change the direction of target government policies (Chenoweth 2013, 355). It is also widely assumed that political leaders want to maintain their office and make policy in a way that enhances or at least does not hurt their political survival (e.g., Bueno de Mesquita et al. 2003). If so, one way to address the above dilemmas is by identifying motives beyond immediate policy concessions that terrorists have against incumbents of target governments. That is, it should be useful to look at whether terrorism hurts the political survival of incumbents. From the standpoint of terrorists, the removal of incumbents whose foreign policies have troubled them can constitute a success. From the perspective of incumbents, concerns with removal should provide even more reasons to avoid or prevent terrorist attacks.

Briefly, we provide a few illustrative examples in which departures from previous trends in transnational terrorism in a given country were concurrent with incumbent removal. Sixteen international terrorist incidents occurred in Nicaragua between 1978 and 1979 before the Somoza military regime collapsed in July 1979. ² Nine of them were carried out jointly by Sandinistas and other foreign nationals. In contrast, only one terrorist incident occurred from 1972 to 1977 in Nicaragua. In December 1982, Swaziland experienced four international terrorist attacks. Three of them were identified as perpetrated by South Africa's African National Congress (ANC) to destabilize the Swaziland government, headed by the new queen regent, Dzeliwe Shongwe, who had expelled ANC representatives in Swaziland (Mzizi 2013). The queen was uncrowned eight months later. Before 1982, Swaziland had experienced only three terrorist attacks since its independence in 1968. Some countries experienced many leadership turnovers and multiple terrorist attacks. For instance, Ireland had ten leadership changes in our time frame of study. The number of terrorist incidents increased prior to all but one of the leadership changes. Also, foreign governments in some instances support transnational groups that use terrorism to destabilize their home governments (Mani 2004). The United States' support of Contras against the Sandinista government in Nicaragua is a well-known example. Violeta Chamorro, a contras leader, replaced the Sandinista incumbent through an upset victory of 55-41 percent in the 1990 presidential election. Nicaraguans' fear of continuing violence and economic deprivation would explain this upset as, before the election, contras waged "a campaign of intimidation": "If you support the [Sandinista] government, we will be back to kill you"³ and President Bush pledged a lift of the economic embargo against Nicaragua if Chamorro would win.⁴

However, we do acknowledge the possibility that the removal of incumbents from office can be an unintended consequence of terrorism, constituting a setback rather than a breakthrough for terrorists as the successors' policies could turn out to be worse for terrorists. For example, recent studies show that, within the context of advanced parliamentary democracies, terrorist events and even the mere threat of an attack can create an impetus to remove leftwing incumbents and put rightwing parties in power who may favor more hawkish policy against the perpetrators (Williams, Koch, and Smith 2012; Getmansky and Zeitzoff 2014). The bottom line is, whether intended or unintended, the effects of terrorism may go beyond immediate policy concessions by affecting the politics of target societies, including the political survival of incumbents.

An increasing number of scholars have examined leader survival mainly in relation to war outcome and its interaction with regime type (e.g., Bueno de Mesquita et al. 2003; Chiozza and Goemans 2004; Colaresi 2004; Debs and Goemans 2010). The evidence is mixed. Yet, recent work by Debs and Goemans (2010) suggests war outcomes affect leader tenure but more acutely so in autocracies than democracies. The null finding for democracies is at odds with the common and plausible assumption that democrats bear greater accountability for their foreign policy and its outcomes. However, selection effects and the difficulty in correctly capturing them may be obscuring the true causal relationship. Studies find that democratic accountability makes leaders selective in making wars (e.g., Reiter and Stam 2002; Park 2011). Democracies only choose weak enemies unless war with strong enemies is necessary and/or leaders expect no electoral punishment (Slantchev, Alexandrova, and Gartzke 2005). The audience costs of war may exist for democratic leaders but they may be hardly observed because of selection (Schultz 2001). While a clear finding on war and leader survival would be an important example of how international environments shape domestic politics, it may not reflect a prevalent pattern: interstate war is an extremely rare yearly event for a state.

These two qualifications, selection effects and infrequent wars, are less severe in the case of external security threats involving transnational terrorism. First, transnational terrorism is much more prevalent than interstate war across countries and times. For instance, in our data set (1968–2004), only about 3 percent of the country years are coded as countries being involved in war, whereas about 39 percent are coded as countries experiencing at least one foreign terrorist attack. Of the 163 countries in our data set, only twenty-four never experienced a foreign terrorist attack while the number rises to 111 for interstate war. In terms of annual averages, a country experiences about 2.3 terrorist attacks in a given year. Second, transnational terrorism is an event externally imposed by foreign actors, unlike war which leaders can be selective about, allowing a more discernable assessment of its impacts on leader tenure. Marinov's study (2005) provides an example on how externally imposed pressure destabilizes the leaders experiencing such constraints. He finds

that economic sanctions significantly weaken leaders' hold on power, whereas foreign military pressure strengthens it. Escribà-Folch and Wright (2010) narrow the focus to autocracies and find that personalist dictators who rely upon foreign aid and trade taxes to maintain their power are more susceptible to economic sanctions than other types of dictators. This line of research provides us with invaluable insights into testing the political effectiveness of external coercion like international terrorism. Traditionally, economic sanctions were viewed as ineffective and costly tools of statecrafts (Galtung 1967). The finding by Hufbauer, Schott, and Elliott (1990) that sanctions were successful in about 35 percent of the 116 cases in their comprehensive investigation did not mute the skeptical view—"sanctions do not work" (Pape 1997). Indeed, Marinov (2005) sets a new path in assessing the effectiveness of sanctions.

In the terrorism literature, recent skeptics like Abrahms (2006, 2012) make the case for the claim that "terrorism does not work." We believe that focusing on leadership change rather than short-term policy change will help us identify other ways in which an externally imposed threat like transnational terrorism is more effective than previously thought and what incentives terrorists possess to engage in such seemingly ineffective strategies. Several studies have already suggested that instances of terrorism can change electoral preferences when focusing on a single case, cases, or a subset of democracies (Berrebi and Klor 2006; Bali 2007; Gassebner, Jong-A-Pin, and Mierau 2011; Williams, Koch, and Smith 2012). But no study to date has examined longitudinally and cross-nationally the direct linkage between terrorism and the survival of political leaders across the globe.

Terrorism and Political Survival

In this section, we develop our expectations about the effect of transnational terrorism on the political survival of leaders. We are informed by the common rationality assumption that terrorists are strategic and purposeful actors. Transnational actors engage in terrorism because they perceive effects from such unlawful coercive methods. Recent studies, however, find terrorism is ineffective at drawing instant political concessions, while it is commonly thought that terrorism is used to express perpetrators' dissatisfaction with a target government. Then, we may need to look beyond immediate political concessions. In fact, by definition, the aims of terrorism go beyond the immediate targets themselves (B. Hoffman 2006).

We explore the possibility that terrorism serves terrorists' purposes by destabilizing incumbent leaders. Removing incumbents can serve perpetrators when they have retaliatory and punitive desires. Also, a policy change is likely to be accompanied with the arrival of a new leader. Below, we provide several plausible mechanisms (some are more direct than others) by which heightened terrorist activity can put the political survival of incumbents in danger. Briefly, transnational terrorism can destabilize incumbents by revealing their incompetence in foreign policy matters, inducing overreactive policies, damaging socioeconomic conditions, and inflicting sociopsychological costs.

The political effects of transnational terrorism may be more profound than previously thought. Transnational terrorism is a foreign policy matter. Foreign policy in many instances is found to be important and salient to the public, even when domestic issues dominate. The evidence from both the US and cross-national studies suggests that the general public quite consistently follows important foreign policy events (Nickelsburg and Norpoth 2000; Singer 2011). Transnational terrorism may signal to the public their leaders' ineptitude with foreign policy issues in at least two ways. First, being a target of frequent transnational terrorist attacks can be interpreted as revealing problems inherent in a leader's foreign policy. When an incumbent engages in a provocative foreign policy counter to some marginalized transnational groups, the affected transnational actors could be tempted to express their dissatisfaction through a violent, scare tactic. The more broadly provocative a leader's policy is the more transnational actors are affected and the more intensely provocative the leader's policy is the more deeply dissatisfied are the transnational actors, both increasing the likelihood of a terrorist incident. When a society is frequently targeted by terror attacks, its constituents may turn to blaming their leader's policy as too inciting. Second, transnational terror attacks may negatively affect the public's perception of the leader's handling of external threats. For a government, a transnational terror attack is, in fact, a security failure in the prevention against external threats and even more so if there are repeated attacks. There is supportive evidence for this line of argument. For instance, Chowanietz (2011) finds that domestic audiences associate frequent terror attacks with problems originating from government policy. Several studies also find that people take terror attacks as a failure in the fundamental government duty of protecting the nation and they actually punish their government (Holmes and de Piñeres 2002; Berrebi and Klor 2006; Sigueira and Sandler 2007). However, these findings are based on a case, a handful of cases, or nongeneralizable game theoretic models.

Terrorism can hurt survival in office by inducing governmental and societal overreactions that may boomerang back against incumbents. Overreactions stretch out the possible range of measures beyond an appropriate level, producing unnecessary but expensive political, economic, and psychological costs. State overreactions lead to restrictions on civil liberties, inefficient use and inflation of defense spending, a surge in transaction costs, and exaggeration of fear that triggers even more distortions in social, economic, and political spheres. These negative externalities alienate the domestic population, damage the nation's international reputation, and may even generate sympathy or support for the terrorist groups. These all can dramatically hinder the nation, triggering then a serious public backlash against the incumbent.

Terrorism is intended to instill fear and distress in target societies (B. Hoffman 2006; Gadarian 2010). Fear and distress tend to lead to overreactions and in turn overreactions tend to exacerbate fear and distress. This increased anguish may set the overall mood of the society into a downturn. For instance, research indicates that terror attacks cause deleterious mental health problems such as posttraumatic stress disorder and depression (Schlenger et al. 2002; Galea et al. 2003). It is also found

that terror-related fear can increase distress, drinking, and cigarette smoking (Richman, Cloninger, and Rospenda 2008; DiMaggio, Galea, and Li 2009). There is further evidence that terrorism decreases individuals' life satisfaction in general (Frey, Luechinger, and Stutzer 2009). Although it is an empirical question, it is reasonable to expect that a decrease in people's welfare stemming from terrorist events can affect leaders' political welfare.

Many studies have found that political instability negatively affects economic growth in general (Mauro 1995; Alesina et al. 1996; Aisen and Veiga 2013) and reduces investments and savings in particular (Venieris and Gupta 1986; Alesina and Perotti 1996). In relation to political survival, a number of cross-national studies have found that adverse economic conditions shorten the length of an incumbent or his party in power (e.g., Londregan and Poole 1990; Marinov 2005; Williams, Koch, and Smith 2012). Likewise, it is reasonable to think that terrorism, as a form of political instability, has adverse economic effects and in turn negative effects for incumbents' tenure. The recent evidence shows that terrorism hurts economic activity in multiple dimensions. Internationally, terrorism shrinks or diverts the flows of capital, goods, individuals, and services (Nitsch and Schumacher 2004; Abadie and Gardeazabal 2008; Thompson 2011). Domestically, terrorism reduces consumption, stock valuation, and investment (Eldor and Melnick 2004; Crain and Crain 2006; Gaibulloev and Sandler 2008). These adverse consequences, both international and domestic, are thought to be related to uncertainty and risks created and increased by terrorism. More risks and uncertainty can create a distortion in the allocation of resources, such as increased spending on security that otherwise could be more productively used for health care, education, and infrastructure (Meierrieks and Gries 2013). This view is consistent with the cross-national finding by Blomberg, Hess, and Weerapana (2004) that terrorism is negatively associated with the investmentto-gross domestic product (GDP) ratio while positively related to government spending. Even worse is the case when the additional cost of security, as a result of persistent terrorism, becomes permanent in terms of a "security" or "terrorism tax" as Saxton (2002, 10) notes. In a similar vein regarding international trade, Walkenhorst and Dihel (2002) note that terrorism adds frictional costs without providing even partial public revenue unlike increased taxes, tariffs, or other trade barriers. Considering all these possible negative economic externalities of terrorism, it is not surprising that the negative effect of terrorism on economic growth has been empirically well documented across different levels of data, subnational, national, regional, and global (Abadie and Gardeazabal 2003; Crain and Crain 2006; Gaibulloev and Sandler 2008, 2011).

Indeed, there are many reasons to think that terrorists try to accrue more profound political effects beyond immediate destruction by seeking to induce suboptimal allocation of political, sociopsychological, and economic assets in target societies. These all redirect government resources and efforts away from more productive uses and therefore alter the perceived quality of the incumbent government and its policies. All in all, we expect that terrorism impairs the political survival of leaders.

Hypothesis 1: Transnational terror attacks will increase the probability that incumbent leaders are removed from power.

We address next three caveats or considerations that may lead us to predictions different from our first hypothesis, namely: (1) selection biases, (2) rally effects, and (3) regime-contingent effects.

First, there are two possible instances of selection bias that would compromise our causal inference about terrorism and incumbent survival. From the perspective of leaders, one might argue that leaders are strategic so that they selectively take provocative actions against transnational actors only when they expect a low chance of retaliatory terrorism. However, there have been too many transnational terrorism attacks against too many countries to think such calculus is operational. More plausible may be that leaders are strategic to the extent that they only choose transnational targets whose retaliatory attacks are not likely to hurt their tenure. If true, this still poses a methodological difficulty to discern a hypothesized relationship. However, this difficulty is about a negative selection bias that goes against, or dampens, the effect specified in Hypothesis 1. That is, we should not find a significant relationship due to the negative selection bias; conversely, if we still find it despite the selection bias, it will provide even stronger support for the relationship proposed in Hypothesis 1. From the perspective of terrorists, however, a positive selection bias may obscure our causal inference. Transnational terrorists may strategically target countries whose leaders are already in danger of losing office and have a weak grip on power. 8 As Williams, Koch, and Smith (2012, 357) note, "for terrorists, attacking a secure government ... may not be fruitful": the government is not likely to be destabilized and thus it does not have to "give in or even negotiate with the terrorists to maintain stability." If terrorism follows a weak incumbent who is regardless going to lose her job, then this leadership change can be wrongly attributed to the incidence of terrorism. The empirical analyses without considering this selection effect will overestimate the effect of transnational terrorism on leadership change. In the empirical section, we address this important issue by, among others, employing the Durbin-Wu-Hausman test and instrumental variable (IV) techniques. Both steps show no evidence that our results for the effects of terrorism are driven by endogenous selection biases.

Second, one might argue that terrorism can benefit incumbents by allowing them to rally people around the flag (see Chenoweth 2010). Recent studies suggest that the specter of transnational terrorist attacks can make citizens seek strong and charismatic leaders even at the expense of civil liberties (Davis 2007; Berinsky 2009; Merolla and Zechmeister 2009). According to Merolla and Zechmeister (2009), heightened foreign threats can make charisma something malleable rather than a natural trait, so citizens project leadership capabilities onto their incumbents. According to Berinsky (2009), public opinion on foreign threats are highly elite-driven as elites decide where and how to stand on security issues. According to Davis (2007), in the wake of disastrous terrorist events citizens trust more their government

actions and are willing to sacrifice their civil liberties for the sake of national security. The 9/11 incident is the focal example of all of these studies. Right after 9/11, the level of trust in government was at the highest since the Kennedy administration (Davis 2007). In fact, Bush's approval rating soared to 90 percent from 51 percent in two weeks, not only the highest increase but also the highest approval rating in the Gallup poll history. However, these studies also suggest that the rally effects found in the 9/11 attack significantly waned over time. For example, Bush's approval rating declined to 49 percent at the end of January 2004 in the Gallup poll. Davis (2007) shows that the willingness to sacrifice civil liberties was significantly reduced by election time in November 2004. Although Bush won the 2004 presidential election, it was by the smallest winning margin for an incumbent president. These findings from the 9/11 attack do not seem to be far away from the general consensus in the diversionary literature: the rally effects are, at best, short lived (Mueller 1973; Brody 1991; Murray 2006). We do not know how the kind of rally effects found in such an unprecedented terrorist event as the 9/11 attack translate into other more typical, less dramatic, forms of terrorist incidents. However, through short-lived increased support for incumbents, terrorism might have a positive impact on leader survival.

Hypothesis 2: Transnational terror attacks will increase the probability that incumbent leaders remain in power in a given year.

Lastly, we address the possibility that the destabilizing effect of international terrorism does not apply equally to leaders in different political systems. Several distinctive features between democracies and autocracies may differentiate how international terrorism affects leader tenure across regime types. First, the level of estrangement (affinity) between leaders and their people is generally lower (higher) in democracies than autocracies, making democrats less politically vulnerable in the face of foreign terror attacks. Democracy empowers people with political rights to participate in political activities and speak out about the government actions that seem at odds with their preferences. By contrast, people in autocracies are largely incapable of affecting government policies as autocratic politics alienate people from the prevailing political processes. Leaders in autocracies face less severe and fewer institutional constraints in seeking rents and private interests. Indeed, recent studies have documented ample evidence that democracies advance people's everyday life with enhanced public services and steady economic growth (e.g., Lake and Baum 2001; Doucouliagos and Ulubasoğlu 2008). Also, democracies are found to be associated with many foreign policy benefits such as peace with other democracies and winning wars quickly against autocracies with fewer human costs (Russett 1993; Reiter and Stam 2002; Park 2013). In democracies, transnational terror attacks are likely to be regarded as a national problem. People may see such events as external challenges against their society and its values by outside nonstate actors whose schemes are terrifying and unpredictable. Thus, rather than being quick to blame leaders, citizens can wait to assess if leaders come up with effective counterterrorism

measures. By contrast, people in autocracies may view foreign terror attacks as another kind of atrocity they are experiencing because policies in such regimes are "not tightly bound by the citizens [incumbents] oversee" (Lake and Baum 2001, 618). However, transnational terrorism may not significantly provoke people to riot against their incumbents as popular revolts are not a frequent path to leadership change in autocratic regimes as compared to coups done by "government insiders" (Svolik 2009, 478). Rather, we think repeated terror attacks are among the foreign policy failures that scholars argue facilitate the coordination efforts to punish incompetent leaders in autocracies (Debs and Goemans 2010).

The second, related, element that differentiates democracies from autocracies is civil liberties. The trade-off between civil liberties and security issues is well known. As discussed above, Davis (2007) shows that people seem willing, at least at first, to sacrifice their liberties in exchange for security against heightened terrorist threats. By projecting charisma and capabilities onto their incumbent (Berinsky 2009; Merolla and Zechmeister 2009), people may prefer to see how their elected incumbent effectively fight against heightened terrorism. Contrastingly, people in autocracies have few civil liberties to give up, leaving little room for a civil liberties—security trade-off and little patience by the populace for foreign policy incompetence on the part of the incumbent. Indeed, autocrats seem to be poorly equipped strategically due to the lack of commitments to civil liberties and the estrangement from their own people. These together limit the possibility that foreign threats induce patriotism and power projection that can balance out the destabilizing effect of transnational terrorism.

Two other factors may be at work. Democrats, bearing higher levels of political accountability, are more careful in policy making than autocrats, so that their chosen foreign policy does not bring about serious political backlashes. This kind of selection effect by democracies is probably less severe when testing the effects of externally imposed threats like transnational terrorism, but it remains a possibility. Finally, it may be simply that in democracies the institutions of leadership change are so well established that externally driven shocks hardly have patterned the impacts on leadership change.

We have identified various plausible explanations for the possible interaction between terrorism and regime type. While we are unable, given the scope of this project, to fully ascertain which of the four mechanisms makes a real difference, since we can only provide evidence related to two of them, we nevertheless provide a much needed empirical benchmark for the possibility of regime-specific effects by testing whether or not transnational terrorism affects democrats' tenure.

Hypothesis 3: Terrorism does not have a discernable destabilizing effect for leaders in democracies.

Next, we further but briefly consider the possibility that the effect of terrorism differs between parliamentary democracies and nonparliamentary ones. If it has any effect concerning democrats, terrorism is likely to hurt leaders in parliamentary democracies rather than those in nonparliamentary democracies for two reasons.

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First, the ability to call an early election in parliamentary systems provides permissible conditions for leadership changes due to increased terrorist threats. Second, removing the prime minister in a parliamentary democracy often involves the removal of her party in power, whereas removing the president in presidential systems may still leave behind a legislature of his party (see, note 8). Policy changes are more likely to occur when both incumbents and their party are removed from power at the same time than when either of them remains in power. Therefore, we hypothesize an interactive effect of terrorism and parliamentary system.

Hypothesis 4: Terrorism has a destabilizing effect for leaders in parliamentary democracies.

Research Design

To assess the impact of transnational terrorism, a form of foreign imposed threat, on political survival, we take an approach similar to that used in studies that examine the relationship between leader tenure and economic sanctions, another form of foreign imposed threat (Marinov 2005; Escribà-Folch and Wright 2010). These studies use logit regression with the inclusion of the count of years in office and its additional functional terms—cubic splines (Beck, Katz, and Tucker 1998) or cubic polynomials (Carter and Signorino 2010)—an approach building upon the argument that time-series cross-sectional data with the binary-dependent variable are equivalent to event history data. Therefore, our dependent variable, Exit, is an annual observation of leader exit in a given country, coded 1 for exit and 0 otherwise. We exclude the right censored cases that in a given year a leader retired due to illness, died for natural causes, or was deposed by another state. The information on leader exit is from Goemans, Gleditsch, and Chiozza's (2009) Archigos (v 2.9). Our temporal domain is from 1968 to 2004 for which our dependent variable and independent variables are jointly available. There are cases in which multiple leadership changes occurred in a country in a given year and we cannot reliably match the information on all independent variables to an individual leader. For these cases, we only consider the first leadership change, since we lag all independent variables by one year 10 to account for the possible endogeneity between the dependent and independent variables.

Our key independent variable, *Terrorism* is the natural logarithm of the number of transnational terrorist incidents that countries experienced in a given year drawn from ITERATE. Consistent with our definition, the project defines terrorism as "the use, or threat of use, of anxiety-inducing, extra-normal violence for political purpose to influence the attitudes and behavior of a target group wider than the immediate victims" (Mickolus et al. 2009, 2). ITERATE records international/transnational incidents that involve perpetrators, targets, victims, institutions, citizens, or interests that transcend the boundaries of countries where the incidents occur. We code the incidents based on the starting location rather than the ending location (Li and Schaub 2004).

Previous studies suggest that other forms of external threats affect the political survival of leaders. First, we control for sanctions that have been found to significantly affect leader survival (Marinov 2005; Escribà-Folch and Wright 2010). We code *Sanction* as 1 if a country was targeted by economic sanctions in a given year and 0 otherwise. The information on sanctions is from Threat and Imposition of Sanctions (v.4.0) collected by Morgan, Bapat, and Kobayashi (2013). Second, we include a set of controls for countries' interstate war involvement and its outcomes regarded as important factors for leader tenure in the literature (Debs and Goemans 2010). Based upon the Correlates of War (COW) Interstate War data (v.4.0), we create four mutually exclusive categories that indicate whether a country was involved in an interstate war in a given year and whether the country ended the war with a loss, a win, or a draw. ¹²

Countries' internal conditions matter for leader tenure (Londregan and Poole 1990). We include a dummy indicator for the presence of a civil war in a given country year. We use the information in the COW's Intrastate War data (v.4.0). In addition, we control for wealth, growth, and capability as they are correlated with stability and stable countries are less subject to foreign threat and its associated shock. *Wealth* is the natural logarithm of GDP per capita while *Growth* is the percent change of GDP per capita between two consecutive years. We use Gleditsch's (2002) expanded GDP data (v.4.1). We measure *Capability* using the COW's Composite Index of National Capability data (v.3.02) to account for the possibility that stronger countries are less vulnerable to foreign threat and leader removal.

Political structures of countries affect leader tenure, and autocrats tend to stay in power longer than democrats. We measure regime types based upon Cheibub, Gandhi, and Vreeland (2010). We first identify whether countries are democracies or autocracies. Then, we distinguish democracies according to whether the heads of states are elected for a fixed term resulting in two dummies, *Parliamentary Democracy* versus *Non-parliamentary Democracy* (i.e., semi- and presidential democracies). Their effects may vary over leaders' time in office. We, therefore, interact them with the log of time in office, *Office Year*, following the convention as both of its level and conditioning effects are likely to be curve-linear.

We use Beck, Katz, and Tucker's (1998) cubic spline method to account for the possible temporal dependence. The advantage of this method over other duration models is that one does not force the baseline hazard either to decrease or increase since it can capture both cases. For the year-counter variable, we use the log of time in office, *Office Year*, to be consistent with its interaction term with the regime dummies. For the splines, we use four knots as a sequence of *F*-tests suggests. We also account for the age of leaders.

Results

In this section, we analyze ITERATE to assess the effect of transnational terrorism on leader tenure, test its endogeneity, and analyze its regime-contingent effects. We

also offer a preliminary analysis from Global Terrorism Database (GTD), where domestic terror incidents are dominant.

Main Effect

In model 1, Table 1, *Terrorism* has a statistically significant positive impact on *Exit* in line with Hypothesis 1, suggesting that as the number of terror attacks increases, the likelihood that an incumbent leader loses power increases. This result holds in the conditional logit model (model 2) that includes both country- and time-specific fixed effects to account for possible unobserved cross-national heterogeneities and time trends.¹⁵

In models 3 and 4, we differentiate terrorist incidents that involve civilian fatalities from those that do not. Interestingly, it is not fatal incidents but nonfatal ones that significantly reduce the spell of leaders in office. Although having a positive sign, *Fatal Terrorism* is highly insignificant in both models. It may be that people abhor fatal terror attacks so much so that they will try to distill their anger by supporting and pushing their leaders to retaliate harshly. This would offset the leadership-destabilizing effect of terrorism. ¹⁷

To give a more substantive interpretation, we translate the estimates into predicted probabilities and their percent change. Using model 1, for the calculations we hold continuous variables at their median and dummy variables at their mode. Figure 1 plots the predicted probabilities across the logged values of terrorist attacks (*Terrorism*). As we go from no incident, $\ln(0+c)$, where c=1, to one incident, $\ln(1+c)$, the probability of leader exit increases by about 8.4 percent. Going from one incident, $\ln(1+c)$, to five incidents, $\ln(5+c)$, increases the probability of leader removal by about 13.5 percent. An increase from the fifth percentile value, no incidents, $\ln(0+c)$, to the ninety-fifth percentile value, eleven attacks, $\ln(11+c)$, produces a 33.2 percent increase in leader removal, by toggling the probability from 0.09 to 0.12. 18

The results for *Terrorism* seem more impressive as we consider those for other correlates of leader survival. *Sanction* is significant with the expected sign in the logit models but highly insignificant with the opposite sign in the conditional (fixed effects) logit models. Interstate war hardly affects the political survival. Not a single war dummy is significant in any model. This may be because leaders tend to go to war only when they know it does not destabilize their political power. *Civil war* appears to increase the likelihood that political leaders lose their office. Yet, its statistical significance is not robust across specifications: its *p* value is slightly over .1 in the logit models. Indeed, of all the threat-related correlates, it is only *Terrorism* that consistently affects leadership change in all the models of Table 1.

Good economies help leaders. Leaders in wealthy countries seem politically safer than those in poor countries. Although this conclusion holds for the logit models, it is not warranted in the fixed effects models. The significant negative sign for *Growth* in all models indicates that leaders tend to hold power longer with economic growth.

Table 1. The Effect of International Terrorism on Leader Exit, International Terrorism: Attributes of Terrorist Events (1968–2004).

	Terro	Terror attacks	Fatal versus non	Fatal versus non-fatal terror attacks
	Model I logit	Model 2 fixed effects	Model 3 logit	Model 4 fixed effects
Terrorism Fatal Nonefatal	0.129** (0.053)	0.166** (0.066)	0.002 (0.100)	0.112 (0.117)
Sanction		-0.007 (0.118)	0.204* (0.108)	-0.003 (0.119) -0.003 (0.119)
War involvement War win	$-0.550 \; (0.474) \\ -0.310 \; (0.602)$	$-0.238 \; (0.493) -0.035 \; (0.546)$	$-0.561 \; (0.476) \\ -0.310 \; (0.600)$	$-0.228~(0.493) \ -0.012~(0.547)$
War Ioss		-0.043 (0.630)	0.093 (0.599)	-0.039 (0.628)
War draw	ı	-0.914 (0.692)	–1.002 (0.655)	(169:0) 068:0—
Civil war		0.448** (0.193)	0.211 (0.139)	0.430** (0.196)
Wealth		0.407 (0.336)	-0.139** (0.059)	0.414 (0.337)
Growth	0	-0.026*** (0.007)	-0.017***(0.005)	-0.026 *** (0.007)
Capability	-2.052 (1.852)	2.181 (7.228)	-2.273 (1.842)	2.132 (7.207)
Democracy				
Parliamentary	0	0.345 (0.513)	0.912** (0.430)	0.347 (0.514)
imes Office Year	0.230 (0.225)	0.539** (0.228)	0.226 (0.223)	0.540** (0.227)
Nonparliamentary (semi- and presidential)		-0.855** (0.436)	0.070 (0.379)	-0.856** (0.435)
imes Office Year		0.703*** (0.231)	0.455 ** (0.193)	0.703*** (0.232)
Age		0.020*** (0.007)	0.011** (0.005)	0.020*** (0.007)
Office Year	-5.417*** (1.176)	-1.302* (0.698)	-5.429*** (I.174)	-1.304* (0.696)
Spline 1		-0.112** (0.044)	-0.000 (0.000)	-0.112*** (0.044)
Spline 2	-0.573***(0.121)	0.064*** (0.023)	-0.575 *** (0.121)	0.063*** (0.023)
Spline 3	0.346*** (0.071)	-0.027** (0.010)	0.347*** (0.071)	-0.027** (0.011)
Spline 4	-0.092 *** (0.018)	0.005 (0.003)	-0.092*** (0.018)	0.005 (0.003)
Observations	2,005	4,454	5,005	4,454
Log Likelihood	-1867.06	-1433.4682	-1866.217	-1432.354

Note: Standard errors clustered by country are in parentheses. *p < .1. **p < .05. *!= 0.05. *!= 0.01 (two-tailed).

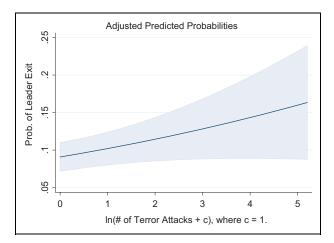


Figure 1. The predicted probabilities of leader exit across the logged values for the number of terror attacks, In (the number of terror attacks + c), where c equals 1. The line traces the mean probabilities with the shaded area denoting their 95 percent confidence intervals.

Material capabilities hardly affect leader tenure as *Capability* is insignificant in all models while its sign differs by model.

Political institutions matter. Leaders in parliamentary democracies tend to have shorter tenure than those in other regimes as *Parliamentary* (both its main and interaction terms) is positive in all models. The main term is significant in the logit models, whereas the interaction term is so in the conditional logit models. Leaders in nonparliamentary systems appear to be relatively safe in their initial years in office, thanks to the institutional setting of a fixed-term tenure. The main term for *Nonparliamentary* is positive and highly insignificant in the logit models whereas it is negative and significant in the conditional logit models. Calculating the linear combination of the main and interactive coefficients reveals in the logit models that nonparliamentary democrats are no less secure than autocrats until the third year in office. They also enjoy higher job safety than parliamentary democrats until the tenth year. The linear combination results from the fixed effects models indicate even higher job safety for leaders in nonparliamentary democracies. These democrats are as safe as autocrats until the sixth year and safer than parliamentary democrats until the fourteenth year.

Leaders' age is important. Age is positive and significant in all models, implying leaders' job insecurity increases as they get older. The results for *Office Year* and *Splines* suggest it is important to account for the temporal dependence in all models.

Selection Bias

In Table 2, we conduct the Durbin-Wu-Hausman test for endogeneity, possibly caused by the selection bias from terrorists targeting governments wherein the

Table 2. Durbin-Wu-Hausman Test for Endogeneity.

	${\tt Stage\ I\ Y} = {\tt Terrorism}$	Stage 2 $Y = Exit$
Terrorism		0.288 (0.274)
Residual (Terrorism)		-0.169 (0.276)
Border	0.175** (0.073)	, ,
Population	0.124*** (0.032)	
Sanction	-0.045 (0.055)	0.195* (0.107)
War involvement	0.232 (0.142)	-0.585 (0.483)
War win	0.071 (0.152)	-0.332(0.590)
War loss	0.187 (0.188)	0.078 (0.598)
War draw	-0.192 (0.122)	-0.990 (0.655)
Civil war	0.501*** (0.085)	0.107 (0.217)
Wealth	0.159*** (0.029)	-0.154*** (0.059)
Growth	-0.001 (0.001)	-0.017*** (0.005)
Capability	0.932 (3.435)	-3.179 (2.733)
Democracy	, ,	, ,
Parliamentary	0.110 (0.181)	0.875** (0.434)
× Office Year	0.082 (0.101)	0.223 (0.225)
Non-parliamentary (semi- and presidential)	0.325** (0.154)	0.023 (0.389)
× Office Year	-0.071 (0.073)	0.466** (0.192)
Age	$-0.003\ (0.002)$	0.011** (0.005)
Office Year	0.117 (0.165)	−5.432*** (I.174)
Spline I	0.000 (0.000)	-0.000 (0.000)
Spline 2	0.013 (0.018)	_0.575*** (0.121)
Spline 3	-0.007(0.011)	0.347*** (0.071)
Spline 4	0.001 (0.003)	-0.092*** (0.018)
Observations	5,005	5,005
	F = 10.45	Log-likelihood = -1866.79

Note: Standard errors clustered by country are in parentheses.

incumbents have a weak grip on power. We employ two instruments from the COW project, the population size (logged) and the number of borders (logged) that a country shares with other countries, which are likely to affect terrorism incidents but not leader removal. In column 1, we regress Terrorism against the two instruments and all other independent variables to obtain its predicted residuals. Both instruments, Border and Population, are statistically significant in heightening terrorist attacks. Also, as expected, these two variables are insignificant in predicting leader removal when we tested them for the original logit model of Exit (i.e., model 1, Table 1). In column 2, we include the predicted residuals from column 1, in the right-hand side of the original logit model of Exit. Then, we need to check if these residuals significantly predict Exit in this augmented regression. Residual in column 2 is highly insignificant (p = .54) indicating the exogeneity of Terrorism and the lack of need

^{*}p < .1. **p < .05. ***p < .01 (two-tailed).

for IVs. ¹⁹ Besides, the negative coefficient for *Residual* suggests that if there were an unmeasured factor that affects both terrorist attacks and leader removal it would cause a negative bias against the proposed relationship in Hypothesis 1. The standard error for *Terrorism* in column 2 is about 5.2 times that in model 1, Table 1, while its coefficient rises about 2.2 times. The linear combination of the coefficients for *Terrorism* and *Residual* is 0.119, comparable to 0.129, estimated for *Terrorism* in model 1, Table 1.

Although unreported in Table 2, we obtained similar results from two other IV techniques such as IV probit and two-stage least squares. Indeed, when the suspected variable is exogenous, these IV estimators are still "consistent," but they will be "much less inefficient" (Cameron and Trivedi 2009, 188). We tested whether the inefficiency was caused by the overidentifying restriction that we used two instruments for one suspected variable. The Hansen *J*-test [χ^2 (1) = 0.652; p = .420] fails to reject the validity of the overidentifying restriction. Taken together, these results indicate that the use of the IV estimator caused the inefficiency in estimating the parameter for *Terrorism*.

Regime Interaction

The effect of *Terrorism* may differ across regime types. We examine this possible interaction by adding two multiplicative interaction terms (*Parliamentary* × *Terrorism* and *Non-parliamentary* × *Terrorism*) to our main model (model 1, Table 1). We utilize dot plots to facilitate our interpretation and discussion of the interactive results. Since the results for all other independent variables remain almost the same as those in model 1, Table 1, we do not report them. Figure 2 presents the coefficient of *Terrorism* across regime types: the first plot compares parliamentary democracy to autocracy while the second plot compares nonparliamentary democracy to autocracy.

Terrorism significantly affects Exit among autocracies. Yet, it has little impact for leaders in parliamentary and nonparliamentary democracies. These results suggest that only autocratic leaders are politically vulnerable to transnational terrorism. The difference between parliamentary democracies and autocracies is statistically meaningful as its 95 percent confidence interval excludes zero in Figure 2a. The difference between nonparliamentary democracies and autocracies is marginally significant (p=0.084) and its 95 percent confidence interval includes zero in Figure 2b.²⁰ Although the estimated coefficient for Terrorism is lower for parliamentary than nonparliamentary democracies, this difference is insignificant (p=.407).

In the theoretical section, we suggested the difference between democracies and autocracies may be explained in terms of political rights and civil liberties. Using the Freedom House's measures for the 1972–2004 period,²¹ we analyze the interaction of *Terrorism* with each measure separately (Figure 3). The effect of *Terrorism* on leader tenure decreases as the level of political rights or civil liberties increases.²²

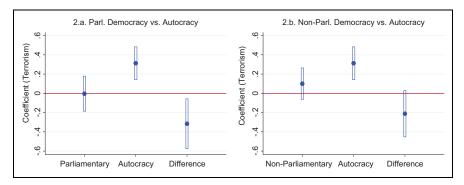


Figure 2. The interactive effects of international terrorism across regime types, International Terrorism: Attributes of Terrorist Events. The first two dots in each plot represent the coefficient for *Terrorism* across two different regime types in comparison and the first two bars their 95 percent confidence intervals. The third dot and bar in each plot denotes the difference in coefficient between two regime types.

Similarly, we interact Terrorism with the polity2 score of the Polity project, ranging from -10 (full autocracy) to 10 (full democracy), with Terrorism and find that the effect of Terrorism decreases as the polity2 score increases.

Taken together, our interactive analyses suggest that the institutional features that empower people and enhance public services generate greater popular confidence in leaders in threatening situations. Perhaps, skeptics like Abrams (2006, 2007, 2012) are partially right. Unlike his general claim for the ineffectiveness of terrorism (2006, 2012), terrorism is a force capable of removing incumbents in target countries, but democrats as compared to autocrats may be better strategically equipped, thanks to democracy's commitment to civil liberties (2007) as well as political rights.

GTD Analysis

We preliminarily examine another popular source of terrorism data, GTD, where domestic incidents are dominant, because some of our theorized routes for the terrorism-removal nexus may apply to domestic terrorism. In Table 3, the estimation sample from GTD spans over the years 1970–2004, sans 1993, where the information is missing in GTD. The results are similar to those of ITERATE. Terrorism destabilizes political leaders as *Terrorism* is positive and significant in both logit and fixed effects models.²³ GTD interactive results somewhat differ from ITERATE ones. *Terrorism* remains insignificant for both parliamentary and nonparliamentary democracies (Figure 4). Yet, the coefficient is much larger for the former (0.087) than the latter (0.008) although the difference between them is insignificant. Furthermore, parliamentary democracies are hardly any different from autocracies as seen in Figure 4a. Citizens in parliamentary democracies may be less willing to

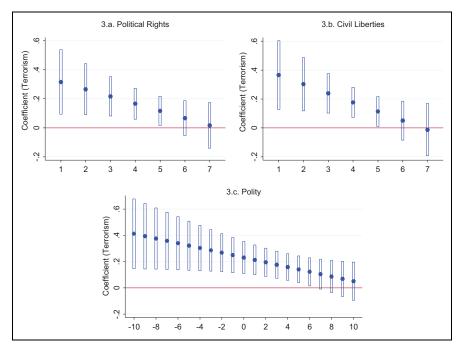


Figure 3. The interactive effects of international terrorism across the values of the Freedom House and Polity indexes.

compromise democratic benefits as they would find leaders more responsible for domestic terrorism and ask for earlier elections.

Conclusion

The conventional wisdom is that terrorists aim to alter the policy course of an aggrieving government, and thus the effect of terrorism must be assessed by immediate policy concessions by target governments. In this study, we posit that terrorism exacts effects that go beyond a limited time horizon. In particular, terrorism propels the removal of incumbents in targeted countries. To test this, we have examined leader survival data from 1968 to 2004 and found that transnational terrorism can increase the likelihood that a political leaders loses power but mainly for autocrats. That is, democrats do not face the same risks. Terrorism does not significantly affect leader exit in democracies. Democratic citizens may be willing to trust and give their leaders further opportunities to fight against terrorism because they have freedoms to sacrifice for security and counterterrorism. Along these lines, we found political rights and civil liberties mitigate the destabilizing effect of terrorism.

Table 3. The Effect of	i errorism on Leader Exi	t, Giodai Terrorisi	n Database (1970–2004).
		Model I logit	Model 2 fixed effect

	Model I logit	Model 2 fixed effect
Terrorism	0.092*** (0.032)	0.085* (0.049)
Sanction	0.183* (0.105)	-0.029 (0.117)
War involvement	-0.461 (0.648)	-0.106(0.640)
War win	-0.271 (0.601)	0.022 (0.567)
War loss	0.209 (0.600)	0.185 (0.631)
War draw	-I.026 (0.648)	-0.924 (0.685)
Civil war	0.127 (0.154)	0.417* (0.221)
Wealth	-0.122** (0.059)	0.437 (0.358)
Growth	-0.018*** (0.005)	-0.027 (0.007)
Capability	-2.616 (1.777)	-4.436 (7.270)
Democracy		
Parliamentary	0.889** (0.439)	0.048 (0.549)
× Office Year	0.241 (0.228)	0.611*** (0.236)
Non-parliamentary (semi- and presidential)	0.045 (0.393)	-0.846* (0.441)
imes Office Year	0.433** (0.198)	0.687*** (0.234)
Age	0.010** (0.005)	0.018*** (0.007)
Office Year	-5.322*** (1.210)	-1.125 (0.718)
Spline 1	-0.000(0.000)	-0.102** (0.045)
Spline 2	-0.567*** (0.124)	0.059** (0.024)
Spline 3	0.343*** (0.073)	-0.026** (0.011)
Spline 4	-0.092*** (0.019)	0.005 (0.003)
Observations	4,764	4,197
Log Likelihood	−1 783.2202	-1354.0469

Note: Standard errors clustered by country are in parentheses.

^{*}p < .1. **p < .05. ***p < .01 (two-tailed).

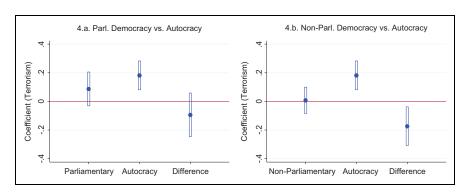


Figure 4. The interactive effects of terrorism across regime types, Global Terrorism Database.

Our study builds a bridge between two well-established literatures. While the literature on leader tenure is growing, including examinations of the impact of economic conditions, wars, and crises, its assessment of how terrorism impacts leader tenure has been more limited. From the terrorism literature, much work has been devoted to primary causes and levels of incidence, but much less attention has been paid to its destabilizing political consequences. Our findings suggest heightened terrorism can be very harmful at least for autocrats.

We anticipate a rich agenda for future research. First, while our work presents an empirical benchmark, namely that terrorism can destabilize political leaders, we have identified several possible mechanisms for this subversion to occur. Specifically, we hypothesized perceived foreign policy failure (due to incompetence or overreaction) and societal distress (economic or psychological) could be the contributing factors to the targeted leader's ouster. In our current specification, we partially control for economic and political conditions but we can envision further work that, for example, more carefully teases out political and socioeconomic disruptions or accounts for leader counterresponses.

Also, more work is needed to unpack the possible nuances produced by regime type and removal type regarding the terrorism-leader removal nexus. For democracies, looking at the outcome of elections rather than the length of tenure would be more compatible with revealing the effects of international terrorism on domestic politics. In addition to high levels of political rights and civil liberties, the wellestablished electoral institutions of democracies may prevent external shocks like war and terrorism from causing unscheduled leadership changes in democracies. For autocracies, future research can specify the different manners of exits (Goemans 2008) when their leaders leave power due to heightened terrorism. Indeed, even some autocracies have elections or other regularized procedures to elect and replace leaders as is now practiced in Communist China. Abrupt leadership changes, however, via coups, popular revolts, assassination, and the like are more typical in autocracies (Svolik 2009). In this sense, the line of studies like Aksoy, Carter, and Wright (2015) that examines the effect of terrorism on coups in autocratic societies is promising. Their work focuses more on domestic terrorism because they analyze GTD, but it can be extended to include ITERATE and distinguish domestic and international terrorism. In this present study, we ourselves have focused on international terrorism although we extended our analysis into GTD. Our preliminary analysis on GTD suggests that similar but nuanced patterns are obtained when domestic events are added to the mix. Further research that examines separately domestic terrorism from international terrorism would be fruitful.

Other mechanisms between leader tenure and terrorism may need to be considered. For example, an insecure leader is likely to repress the society making more citizens dissidents and prone to react violently against the repressive government, which in turn yields more civil wars (Young 2013). In this path, we see a possible link for domestic terrorism in that the repressive policy of an insecure leader will be eventually politically fatal: state repression leads to rising domestic terrorism that

reduces leader tenure. A multiple-stage design similar to the one in Young (2013) can be adopted to prove this empirically and theoretically fruitful venue.

All in all, political leaders, both democratic and autocratic, may increase their chances of political survival by, as we might expect, carrying out less conflictual and provocative foreign policies. Of course, this in many instances may not be possible, as when core differences in ideology or values generate the antagonism. Then, strong counterterrorism measures that are carefully planned and executed, but not overreactive, are an alternative strategy for a besieged targeted government. Otherwise, a sustained campaign of terrorism may prove quite effective for transnational terrorists to induce political destabilization.

Authors' Note

The online appendix and replication materials are available at http://jcr.sagepub.com/ and www.johannpark.org.

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Notes

- Research on the causes of terrorism is vast. For the latest comprehensive review, see Gassebner and Luechinger (2011) and Chenoweth (2013). For an example of studies focusing on political causes, Bali and Park (2014) show how electoral politics affect terrorist incidents.
- 2. The numbers for terrorism incidents are based upon International Terrorism: Attributes of Terrorist Events.
- 3. Toronto Star, October 27, 1989. "U.S. trying to disrupt election in Nicaragua, Canadians report."
- 4. The Washington Post, November 9 1989. "Bush vows to end embargo if Chamorro wins."
- 5. We thank an anonymous reviewer for pointing out this possibility.
- 6. In the Online Appendix, we provide the descriptive statistics of our data and a list of the 163 countries in our sample along with the annual average, maximum, and minimum numbers of terrorist attacks for the period 1968 to 2004.

7. Pape (1997) criticizes that the success rate of sanctions has been overestimated.

- 8. We owe this insight into an anonymous reviewer.
- 9. Of course, democracies are not completely immune from the pitfalls of political alienation; in fact, increasing alienation and decreasing participation have long been concerns in representative democracies (Finifter 1970; Norris 2011). These problems, however, are a matter of degree. Moreover, people in democracies can be politically inactive by their choices, while people in autocracies are set to be politically incapable by institutional design.
- 10. Allowing multiple failures for a country in a given year by using the leader years as the unit of analysis does not change our results for the effect of international terrorism on leader survival.
- 11. The effect of terrorist incidents is likely to be curve-linear. Since $\ln (0 \text{ incident})$ is undefined, we add a constant value, 1, before taking the log: Terrorism = $\ln [c + \text{the number of terrorist incidents}]$.
- 12. Countries can be involved in multiple wars in a given year, but there is only one such case during the time frame of our data set. The Vietnamese–Cambodian war (1977–1979) resulted in another war in 1979 between China and Vietnam. This Sino-Vietnamese war ended in 1979. The Correlates of War coded Vietnam as the loser of these wars and thus we code accordingly for Vietnam's 1979 data entry.
- 13. For the year counter, we code 1 for the first year, 2 for the second year, and so on.
- 14. Small changes in setting the knots do not change our results.
- 15. Following an anonymous reviewer's insight, we use standard errors clustered by country to account for possible serial correlation within cluster as well as heteroscedasticity.
- 16. The same result holds when we exclude all possible influential observations identified by Cook's distance.
- 17. We reran models 1 and 3 on the sample used in the fixed effects models (models 2 and 4) that dropped 551 observations of twenty-three countries due to no within-country variation. We obtained consistent results for this sample.
- 18. For the constant, *c*, used for the logarithm transformation, we also tried different values such as 0.2, 0.4, 0.6, and 0.8. The positive effect of Terrorism remains significant at the 0.05 level for all of these constant values and the results for predicted probabilities do not change substantively across these values.
- 19. We repeated this test by using only one of the two instruments, *Border and Population*, one at a time and earned similar results. While each variable has a significant positive impact on *Terrorism* in column 1, the predicted residuals obtained from column 1 are insignificant in predicting *Exit* in column 2.
- 20. The results for Fatal Terrorism and Nonfatal Terrorism hold for the interaction analysis. Fatal Terrorism is insignificant for all regime types, while Nonfatal Terrorism is significant only for autocracies. The results are also qualitatively the same in the fixed effects model.
- 21. The Freedom House data collection starts in 1972. We rescaled the Freedom House Indexes into ranging from one (least free) to seven (most free).

- 22. We preliminarily tested the presumed negative relationship between terrorist attacks and civil liberties by regressing the Freedom House measures for civil liberties and political rights, respectively, against all other lagged independent variables for democratic countries in our sample. We found that terrorist attacks have a significant negative impact on both political rights and civil liberties.
- 23. We reran model 1 on the sample used in the fixed effects models (model 2) that dropped 567 observations of 24 countries due to no within-country variation. We obtained consistent results for this sample.

Supplemental Material

The online appendix is available at http://jcr.sagepub.com/supplemental.

References

- Abadie, Alberto, and Javier Gardeazabal. 2003. "The Economic Costs of Conflict: A Case Study of the Basque Country." *American Economic Review* 93:113-32.
- Abadie, Alberto, and Javier Gardeazabal. 2008. "Terrorism and the World Economy." European Economic Review 52:1-27.
- Abrahms, Max. 2006. "Why Terrorism Does Not Work." International Security 31:42-78.
- Abrahms, Max. 2007. "Why Democracies Make Superior Counterterrorists." *Security Studies* 16:223-53.
- Abrahms, Max. 2012. "The Political Effectiveness of Terrorism Revisited." *Comparative Political Studies* 45:366-93.
- Aisen, Ari, and Francisco José Veiga. 2013. "How Does Political Instability Affect Economic Growth?" *European Journal of Political Economy* 29:151-67.
- Aksoy, Deniz, David Carter, and Joseph Wright. 2015. "Terrorism and the Fate of Dictators." World Politics 67:423-68.
- Alesina, Alberto, Sule Ozler, Nouriel Roubini, and Phillip Swagel. 1996. "Political Instability and Economic Growth." *Journal of Economic Growth* 1:189-211.
- Alesina, Alberto, and Roberto Perotti. 1996. "Income Distribution, Political Instability, and Investment." *European Economic Review* 40:1203-28.
- Bali, Valentina. 2007. "Terror and Elections: Lessons from Spain." *Electoral Studies* 26: 669-87.
- Bali, Valentina, and Johann Park. 2014. "The Effects of the Electoral Calendar on Terrorist Attacks." *Electoral Studies* 35:346-61.
- Beck, Nathaniel, Jonathan Katz, and Richard Tucker. 1998. "Taking Time Seriously: Time-series-cross-section Analysis with a Binary Dependent Variable." *American Journal of Political Science* 42:1260-88.
- Berinsky, Adam. 2009. In Time of War: Understanding American Public Opinion from World War II to Iraq. Chicago: University of Chicago Press.
- Berrebi, Claude, and Esteban Klor. 2006. "On Terrorism and Electoral Outcomes." *Journal of Conflict Resolution* 50:899-925.
- Blomberg, S. Brock, Gregory Hess, and Akila Weerapana. 2004. "Economic Conditions and Terrorism." *European Journal of Political Economy* 20:463-78.

Brandt, Patrick, and Todd Sandler. 2010. "What Do Transnational Terrorists Target? Has It Changed? Are We Safer?" *Journal of Conflict Resolution* 54:214-36.

- Brody, Richard. 1991. Assessing the President: The Media, Elite Opinion, and Public Support. Stanford, CA: Stanford University Press.
- Bueno de Mesquita, Bruce, Alastair Smith, Randolph Siverson, and James Morrow. 2003. The Logic of Political Survival. Cambridge, MA: MIT Press.
- Cameron, Collin, and Pravin Trivedi. 2009. Microeconometrics Using Stata. College Station, TX: Stata Press.
- Carter, David, and Curtis Signorino. 2010. "Back to the Future: Modeling Time Dependence in Binary Data." *Political Analysis* 18:271-92.
- Cheibub, José, Jennifer Gandhi, and James Vreeland. 2010. "Democracy and Dictatorship Revisited." *Public Choice* 143:67-101.
- Chenoweth, Erica. 2010. "Democratic Competition and Terrorist Activity." *Journal of Politics* 72:16-30.
- Chenoweth, Erica. 2013. "Terrorism and Democracy." *Annual Review of Political Science* 16:355-78.
- Chiozza, Giacomo, and Hein Goemans. 2004. "International Conflict and the Tenure of Leaders: Is War Still Ex Post Inefficient." *American Journal of Political Science* 48: 604-19.
- Chowanietz, Christophe. 2011. "Rallying around the Flag or Railing against the Government? Political Parties' Reactions to Terrorist Acts." *Party Politics* 17:673-98.
- Colaresi, Michael. 2004. "Aftershocks: Post-war Leadership Tenure, Rivalry, and Regime Dynamics." *International Studies Quarterly* 48:713-27.
- Crain, Nicole, and Mark Crain. 2006. "Terrorized Economies." Public Choice 128:317-49.
- Davis, Darren. 2007. Negative Liberty: Public Opinion and the Terrorist Attacks on America. New York: Russell Sage Foundation.
- Debs, Alexandre, and Hein Goemans. 2010. "Regime Type, the Fate of Leaders and War." *American Political Science Review* 104:430-46.
- DiMaggio, Charles, Sandro Galea, and Guohua Li. 2009. "Substance Use and Misuse in the Aftermath of Terrorism: A Bayesian Meta-analysis." *Addiction* 104:894-904.
- Doucouliagos, Hristos, and Mehmet Ulubaşoğlu. 2008. "Democracy and Economic Growth: A Meta-analysis." *American Journal of Political Science* 52:61-83.
- Eldor, Rafi, and Rafi Melnick. 2004. "Financial Markets and Terrorism." *European Journal of Political Economy* 20:367-86.
- Enders, Walter, and Todd Sandler. 2005. "After 9/11: Is It All Different Now?" *Journal of Conflict Resolution* 49:259-77.
- Escribà-Folch, Abel, and Joseph Wright. 2010. "Dealing with Tyranny: International Sanctions and the Survival of Authoritarian Rulers." *International Studies Quarterly* 54: 335-59.
- Finifter, Ada. 1970. "Dimensions of Political Alienation." American Political Science Review 64:389-410.
- Frey, Bruno, Simon Luechinger, and Alois Stutzer. 2009. "The Life Satisfaction Approach to Valuing Public Goods: The Case of Terrorism." *Public Choice* 138:317-45.

- Gadarian, Shana. 2010. "The Politics of Threat: How Terrorism News Shapes Foreign Policy Attitudes." *Journal of Politics* 72:469-83.
- Gaibulloev, Khusrav, and Todd Sandler. 2008. "Growth Consequences of Terrorism in Western Europe." *Kyklos* 61:411-24.
- Gaibulloev, Khursrav, and Todd Sandler. 2011. "The Adverse Effect of Transnational and Domestic Terrorism on Growth in Africa." *Journal of Peace Research* 48:355-71.
- Galea, Sandro, David Vlahov, Heidi Resnick, Jennifer Ahern, Ezra Susser, Joel Gold, Michael Bucuvalas, and Dean Kilpatrick. 2003. "Trends of Post-traumatic Stress Disorder in New York City after the September 11 Terrorist Attacks." *American Journal of Epidemiology* 158:514-24.
- Galtung, Johan. 1967. "On the Effects of International Economic Sanctions, with Examples from the Case of Rhodesia." *World Politics* 19:378-416.
- Gassebner, Martin, Richard Jong-A-Pin, and Jochen Mierau. 2011. "Terrorism and Cabinet Duration." *International Economic Review* 51:1253-70.
- Gassebner, Martin, and Simon Luechinger. 2011. "Lock, Stock, and Barrel: A Comprehensive Assessment of the Determinants of Terror." *Public Choice* 149:235-61.
- Getmansky, Anna, and Thomas Zeitzoff. 2014. "Terrorism and Voting: The Effect of Rocket Threat on Voting in Israel Elections." *American Political Science Review* 108:588-604.
- Gleditsch, Kristian. 2002. "Expanded Trade and GDP Data." *Journal of Conflict Resolution* 46:712-24.
- Goemans, Hein. 2008. "Which Way Out? The Manner and Consequences of Losing Office." Journal of Conflict Resolution 52:771-94.
- Goemans, Henk, Kristian Gleditsch, and Giacomo Chiozza. 2009. "Introducing Archigos: A Data Set of Political Leaders." *Journal of Peace Research* 45:237-51.
- Hoffman, Aaron. 2010. "Voice and Silence: Why Terrorist Groups Take Credit for Acts of Terror." Journal of Peace Research 47:615-26.
- Hoffman, Bruce. 2006. Inside Terrorism. 2nd ed. New York: Columbia University Press.
- Holmes, Jennifer, and Sheila Amin Gutiérrez De Piñeres. 2002. "Sources of Fujimori's Popularity: Neo-liberal Reform or Ending Terrorism." *Terrorism and Political Violence* 14:93-112.
- Hufbauer, Gary, Jeffrey Schott, and Kimberley Elliott. 1990. *Economic Sanctions Reconsidered: History and Current Policy*. Washington, DC: Peterson Institute for International Economics.
- Lake, David, and Matthew Baum. 2001. "The Invisible Hand of Democracy: Political Control and the Provision of Public Services." *Comparative Political Studies* 34:587-621.
- Li, Quan, and Drew Schaub. 2004. "Economic Globalization and Transnational Terrorism." Journal of Conflict Resolution 48:230-58.
- Londregan, John, and Keith Poole. 1990. "Poverty, the Coup Trap, and the Seizure of Executive Power." *World Politics* 42:151-83.
- Mani, Rama. 2004. "The Root Causes of Terrorism and Conflict Prevention." In *Terrorism and the UN: Before and After September* 11, edited by Jane Boulden and Thomas Weiss, 219-41. Bloomington: Indiana University Press.

Marinov, Nikolay. 2005. "Do Economic Sanctions Destabilize Country Leaders?" *American Journal of Political Science* 49:564-76.

- Mauro, Paolo. 1995. "Corruption and Growth." *Quarterly Journal of Economics* 110:681-712.Meierrieks, Daniel, and Thomas Gries. 2013. "Causality between Terrorism and Economic Growth." *Journal of Peace Research* 50:91-104.
- Merolla, Jennifer, and Elizabeth Zechmeister. 2009. *Democracy at Risk: How Terrorist Threats Affect the Public*. Chicago: University of Chicago Press.
- Mickolus, Edward, Todd Sandler, Jean Murdock, and Peter Flemming. 2009. *International Terrorism: Attributes of Terrorists Events (ITERATE) Data Codebook*. Dunn Loring, VA: Vinyard Software.
- Morgan, Clifton, Navin Bapat, and Yoshiharu Kobayashi. 2013. *Threat and Imposition of Sanctions (TIES) Data 4.0 Users' Manual: Case Level Data*. Chapel Hill: University of North Carolina.
- Mueller, John. 1973. War, Presidents and Public Opinion. New York: John Wiley & Son.
- Murray, Shoon. 2006. "Tough Talk, Public Predispositions, and Military Action: Reassessing the 'Rally-round-the-flag Phenomenon." In *Approaches, Levels, and Methods of Analysis in International Politics: Crossing Boundaries*, edited by Harvey Starr, 141-56. New York: Palgrave.
- Mzizi, J. B. 2013. Religion and Politics in Swaziland. Bloemfontein, South Africa: Sun Press.Nickelsburg, Michael, and Helmut Norpoth. 2000. "Commander-in-chief or Chief Economist? The President in the Eye of the Public." Electoral Studies 19:313-32.
- Nitsch, Volker, and Dieter Schumacher. 2004. "Terrorism and International Trade: An Empirical Investigation." *European Journal of Political Economy* 20:423-33.
- Norris, Pippa. 2011. *Democratic Deficit: Critical Citizens Revisited*. New York: Cambridge University Press.
- Pape, Robert. 1997. "Why Economic Sanctions Do Not Work." *International Security* 22: 90-136
- Park, Johann. 2011. "Exploring the Second Wave of Democratic Peace Critiques: Commonality, Territoriality, and Selectivity." Ph.D. Diss. Michigan State University, East Lansing.
- Park, Johann. 2013. "Forward to the Future? The Democratic Peace after the Cold War." *Conflict Management and Peace Science* 30:178-94.
- Reiter, Dan, and Allan Stam. 2002. Democracies at War. Princeton, NJ: Princeton University Press. Richman, Judith, Lea Cloninger, and Kathleen Rospenda. 2008. "Macrolevel Stressors, Terrorism, and Mental Health Outcomes: Broadening the Stress Paradigm." American Journal of Public Health 98:323-29.
- Russett, Bruce. 1993. *Grasping the Democratic Peace: Principles for a Post-cold War World*. Princeton, NJ: Princeton University Press.
- Saxton, Jim. 2002. "The Economic Costs of Terrorism." Joint Economic Committee Working Paper, U.S. Congress. http://www.jec.senate.gov/public/.
- Schlenger, William, Juesta Caddell, Lori Ebert, Kathleen Jordan, Kathryn Rourke, David Wilson, Lisa Thalji, Michael Dennis, John Fairbank, and Richard Kulka. 2002. "Psychological Reactions to Terrorist Attacks: Findings from the National Study of Americans' Reactions to September 11." Journal of the American Medical Association 288:581-88.

- Schultz, Kenneth. 2001. "Looking for Audience Costs." *Journal of Conflict Resolution* 45: 32-60.
- Singer, Mattew. 2011. "Who says 'It's the Economy'? Cross-national and Cross-individual Variation in the Salience of Economic Performance." *Comparative Political Studies* 44: 284-312.
- Siqueira, Kevin, and Todd Sandler. 2007. "Terrorist Backlash, Terrorism Mitigation, and Delegation." *Journal of Public Economics* 91:1800-15.
- Slantchev, Branislave, Anna Alexandrova, and Erik Gartzke. 2005. "Probabilistic Causality, Selection Bias, and the Logic of the Democratic Peace." *American Political Science Review* 99:459-62.
- Svolik, Milan. 2009. "Power Sharing and Leadership Dynamics in Authoritarian Regimes." American Journal of Political Science 53:477-94.
- Thompson, Alexi. 2011. "Terrorism and Tourism in Developed versus Developing Countries." *Tourism Economics* 17:693-700.
- Venieris, Yiannis, and Dipak Gupta. 1986. "Income Distribution and Sociopolitical Instability as Determinants of Savings: A Cross-sectional Model." *Journal of Political Economy* 94:873-83.
- Walkenhorst, Peter, and Nora Dihel. 2002. "The Impact of the Terrorist Attacks of 11 September 2001 on International Trading and Transport Activities." *Organization for Economic Cooperation and Development*. https://mpra.ub.uni-muenchen.de/12277/.
- Williams, Laron, Michael Koch, and Jason Smith. 2012. "The Political Consequences of Terrorism: Terror Events, Causalities, and Government Duration." *International Studies Perspectives* 14:343-61.
- Young, Joseph. 2013. "Repression, Dissent, and the Onset of Civil War." *Political Research Quarterly* 66:516-32.