Rewarding Bad Behavior: How Governments Respond to Terrorism in Civil War

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Although violent organizations often use terrorism as a means to achieve political aims, recent studies suggest the tactic is ineffective because it fails to help groups gain concessions. While focused exclusively on concessions, these studies overlook other important markers of success, specifically whether groups are invited to participate in negotiations as a result of their use of terrorism. Extant studies also conduct statistical analyses on overly aggregated data, masking any effect terrorism has on important bargaining outcomes. Using new monthly data on the incidence of negotiations and the number of concessions offered to groups involved in African civil wars, this paper demonstrates that rebel groups are both more likely to be granted the opportunity to participate in negotiations and offered more concessions when they execute a greater number of terror attacks during civil wars.

Findings in recent literature make the occurrence of terrorism puzzling. Some scholars suggest that terrorism is ineffective because groups using the tactic are no more likely to make gains on policy issues than groups that do not (for recent examples, see Abrahms 2006, 2012). These findings are perplexing, given the frequency of terror attacks and the prevailing belief that the actors executing them are rational (Kydd and Walter 2002, 344; Pape 2003, 265). Particularly, if rational actors practice terrorism, the tactic should be employed only if and when it comprises part of a rational strategy. Thus, if terrorism does not produce at least modest gains for groups using it, we should observe a decreasing trend in terrorism over time. Instead, we have witnessed a rise in terrorism since the early 1980s (Pape 2003, 343). This trend likely suggests groups have reasonable expectations that using terrorism will lead to some measure of success. However, given conclusions in extant literature suggesting terrorism is largely ineffective at gaining concessions, it is not clear when it is expected to work and what groups seek to gain. Although existing work does much to elucidate cases where terrorism has been unsuccessful, it does not offer much explanation of why groups still expect to generate benefits from using the tactic. An explanation is necessary, however, to make sense of the phenomenon.

I address this puzzle. Using monthly data on African civil conflicts from 1989 to 2010, I examine whether terrorism helps groups make gains in war. In accordance with previous studies, I test the effect that terror attacks have on the number of concessions rebels are offered. I also go beyond existing work by examining a new measure of gains. Specifically, I consider whether states extend negotiations to their rebels when they execute more acts of terrorism. With new data on the incidence of negotiations and concessions in civil wars, I find groups employing a greater number of terror attacks are more likely to participate in negotiations and gain more concessions on their aims. I argue that terrorism allows violent groups to make gains because the tactic undermines states’ ability to win in conflict. I apply the “power to hurt” argument to explain why terrorism can force states sustaining attacks to attempt conciliation with groups they fight in civil war. Thus, I conclude terrorism can be an effective tactic for groups involved in civil conflict.

This study differs from existing studies in at least two important ways. First, I consider a new way of evaluating the efficacy of terrorism. Second, I examine another measure of success, the opportunity to participate in negotiations. Evaluating the incidence of terror attacks in conjunction with the number of concessions offered to groups involved in civil wars demonstrates that terrorism is an effective tactic for groups involved in civil conflict. The findings in this study demonstrate that groups employing terror attacks are more likely to gain concessions in civil wars. Thus, this study provides evidence that terrorism can be an effective tactic for groups involved in civil conflict.

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if attacks are successful by examining whether more terrorism leads to an increase in the probability of negotiations with the state. I also explain why negotiations are a particularly compelling metric by which to judge the success of the tactic. Similar to previous studies, I examine whether terror attacks prompt concessions from state targets. However, in contrast to existing studies, I examine terrorism in the context of civil war. This is particularly important because it allows for the evaluation of terrorism when groups have available other strategies to gain state compliance, namely, insurgency. Existing studies focus only on groups where terrorism constitutes the primary or even exclusive method of extracting concessions from the state. In contrast, looking at the use of terrorism by groups involved in civil wars allows us to consider the efficacy of the tactic when other tactics are available.1 Such an analysis is important because even though terrorism may not be objectively effective at producing gains, it may be relatively effective given other available options.

Tilly (2004) argues that strategies of terror are often used in conjunction with other political strategies. Further, he proposes there is unlikely any “distinct, coherent class of actors” known as terrorists, as any actor can employ terror (Tilly 2004, 5). Tilly suggests, instead, that terrorism can be used by an array of actors as part of a strategy. It is, therefore, not unreasonable to look at acts of terrorism conducted by groups involved in civil wars. As Tilly (2004) expects, Findley and Young (2012) find that acts of terrorism overlap substantially with other types of political violence, specifically civil war. I employ the definition given by Lake (2002, 17), where “terrorism is the irregular use of violence by nonstate groups against nonmilitary targets and personnel for political ends.”

Aside from directly addressing the debate on the effectiveness of terrorism, this article is important because it addresses when and why negotiations are initiated in civil war. As yet, there has been only one other study systematically examining the determinants of negotiations in civil war (Bapat 2005). While scholars have argued that groups use terrorism to end peace processes (Findley and Young 2012; Kydd and Walter 2002), no studies have examined whether groups use terrorism to begin them. This article fills this gap. I offer a theoretical account explaining how acts of terrorism convince a state to negotiate with rebels when they previously chose not to.

Examining formal talks as an outcome is valuable because negotiations typically occur before other stages in a peace process and should certainly affect whether subsequent stages occur. If bargaining dyads cannot contemplate sitting down for formal discussions, they should not be expected to reach agreements. Thus, considering what makes governments alter their postures about conciliation is vital for understanding other stages of conflict resolution.

The Debate

The debate regarding the effectiveness of terrorism has been enduring yet inconclusive. Despite the number of scholars addressing the same question, there seems to be no consensus on whether terrorism constitutes a reasonable, efficient tactic. Pape (2003), for example, shows terrorism can be effective, as groups have been able to force modest policy changes about half of the time when employing suicide terrorism. He notes, however, that the use of this form of terrorism is unlikely to achieve generous policy goals and concludes that while terrorism is productive, there are limits on what it can accomplish. Abrahms (2012) suggests terrorism is not effective for almost the same reason; terrorism fails to generate significant policy concessions. Abrahms (2012, 367) argues that while terrorism may allow foreign terrorist organizations to achieve process goals, or goals ensuring an organization’s survival, acts of terrorism do not enhance an organization’s ability to gain concessions on political aims. Terrorism is expected to be especially ineffective when attacks target civilians rather than the military.

More studies fall on either side of the debate (Abrahms 2006; Chenoweth et al. 2009; Jones and Libicki 2008; Kydd and Walter 2002; Lake 2002). The most recent study concludes, though, that terrorism does not lead to significant policy advancements, when advancements are measured by an organization’s ability to extract a great number of policy concessions (Abrahms 2012). It is important to consider, however, that there are more outcomes that may signify the success of a campaign and more ways to evaluate gains made by violent organizations. With few exceptions, the literature fails to consider the effectiveness of the tactic by any other measures. One such exception is Kydd and Walter (2002), who consider how terrorism can be used strategically when an

1 Guerilla warfare is a tactic used in insurgency where nonstate actors attack small units of government forces (Fearon and Laitin 2003; Price 1977). Terrorism is violence employed by nonstate actors to force changes in government policy by targeting noncombatants. Unlike guerilla tactics, terrorism does not target combatants. Within the context of civil conflict, rebels can carry out war using guerilla or conventional tactics alone or those tactics coupled with terrorism. Conceptually, as governments must be the main targets of violence and must reciprocate it, terrorism cannot be the sole tactic used in civil war. As such, studying terrorism in this context allows us to compare the gains of groups using terrorism in conjunction with either conventional or guerilla tactics to those executing war without terrorism.
organization’s goal is to spoil a peace deal. Although, in theory, the success of the tactic can be evaluated in a variety of ways, the empirical literature has focused myopically on whether groups are able to force concessions. As gaining the opportunity to negotiate their demands is a goal for many violent organizations, a group’s tactical choice may also be a function of this objective. Groups may be more likely to employ terrorism if they believe it will get them to the bargaining table. Gaining concessions is a measure of success for groups, but participating in negotiations is as well. As yet, we do not know whether terrorism influences negotiations. This article examines this important question.

In the next section, I discuss why examining negotiations is a reasonable way to evaluate the effectiveness of terrorism. I begin by explaining why negotiations constitute a significant gain for dissident groups. Specifically, I discuss reasons states are reluctant to offer negotiations to violent groups and why this is especially so with regard to groups utilizing terrorism. In the section that follows, I explain why despite a government’s reluctance, negotiations with these groups often occur. I also discuss how terrorism may affect a government’s willingness to meet rebels’ demands with concessions.

**Negotiations as a Means to Evaluate Terrorism**

Examining whether formal talks occur is an appropriate way to evaluate the utility of terrorism, as talks provide violent groups with essential benefits. Engaging in peace talks is important for groups as the opening of negotiations acts to formally recognize the group and its demands. Such recognition is significant given that groups often use violence to gain formal acknowledgment from the state (Crenshaw 1981, 386). Negotiations also have a more straightforward benefit of initiating peace processes (Pillar 1983). By extending talks, governments signal their willingness to compromise. Once negotiations are underway, dyads begin discussing terms of peace, which are often related to concessions for the groups involved. Thus, the opening of talks signifies to rebels that their demands will be heard and may even be addressed. As little explicit bargaining takes place in the absence of negotiations, there is little chance of concessions for groups before negotiations are extended. And even though talks do not always lead to favorable deals, groups engaged in dialogue should be closer to gaining concessions than groups that have not begun negotiating over their demands. For these reasons, negotiations are not a negligible measure of success, and gaining a seat at negotiations, like gaining other concessions, can be considered a substantial achievement. That a third of the African rebel groups fighting between 1989 and 2010 have made explicit demands for negotiations with the state underscores the importance of talks for rebel groups.

States are generally reluctant to negotiate with groups using violence to achieve their aims but have more reason to be opposed to dialogue with those using terrorism. States are concerned that granting negotiations to groups using terrorism confers on them legitimacy (Neumann 2007; Toros 2008). Negotiations are not only likely to legitimize the group but also are expected to legitimize the strategies and tactics they employ. Thus, negotiating with groups choosing terrorism as a tactic likely marginalizes organizations choosing to seek change peacefully. Negotiations are likely to incentivize such behavior and negatively influence groups having previously shied away from such tactics (Neumann 2007; Toros 2008; Wilkinson 2006). Essentially, negotiating with groups employing extreme tactics rewards “bad” behavior, and rewarding the behavior may help perpetuate it. Despite such strong incentives to not negotiate with groups using terrorism, governments often do (Bapat 2005, 2006). A recent example can be found in Gaza, where Israel negotiated a cease-fire with Hamas after a string of attacks. Notably, members of Fatah voiced concern that Israel’s response to Hamas’s violent activity might force them to reconsider their nonviolent tactics, as Hamas’s violence is rewarded with negotiations and Fatah’s attempts at gaining concessions have been rebuffed. As bad behavior seems to be rewarded with negotiations, it is logical to conclude that terrorism can be effective at gaining some types of government compliance.

As it is most states’ first inclination to reject compromise with their opposition, we can assume most governments will not decide to negotiate without being

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2 Although rebels must agree for talks to begin, I characterize the decision to negotiate as the government’s. As most rebel groups have aims they seek to accomplish and can only accomplish them through negotiated settlements, groups should generally prefer negotiations. Most groups will accept negotiations if offered, although some do decline them. Most governments, on the other hand, reject calls for negotiations initially.

3 Sixty-four percent of concessions occurred in months when negotiations were held.

4 Of 106 African rebel groups, 36 have made explicit demands for negotiations with the state.

compelled to do so. Something substantial must occur to change the government’s inflexible bargaining posture to one that is more conciliatory. Features of a conflict, such as an increase in costs or a hurting stalemate, may explain changes in governments’ postures (Zartman 1993). In a related fashion, features of an opponent, such as the tactics they employ, may produce specific conditions, including steep increases in costs that explain a government’s re-orientation toward compromise. Specifically, tactics that increase rebels’ ability to hurt governments and frustrate governments’ ability to hurt them back are likely to produce a more conciliatory government posture. Governments will be more inclined to cooperate when rebels are able to impose extreme costs and their ability to reciprocate costs declines. So, while governments like that of al-Assad in Syria argue “no political dialogue or political activity can succeed while there are armed terrorist groups operating,” we know that political dialogue will succeed when the government needs it to.6 In the next section, I explain why terrorism can offer rebels this power to hurt and why use of the tactic should be associated with an increase in the likelihood of negotiations and the number of concessions offered.

**Terrorism and the Power to Hurt**

> Whether it is sheer terrorist violence to induce an irrational response, or cool premeditated violence to persuade somebody that you mean it and may do it again, it is not the pain and damage itself but its influence on somebody's behavior that matters. It is the expectation of more violence that gets the wanted behavior, if the power to hurt can get it at all.

—Thomas Schelling (1966, 3)

Actors possess the power to hurt when they have the ability to inflict costs their opponent cannot reciprocate. With respect to interstate war, Slantchev (2003) argues the realization of the power to hurt increases the probability that belligerents will pursue peaceful settlements, as it opens up a range of bargains that would not otherwise exist. Actors are expected to accept less-than-favorable settlement terms when they recognize an opponent’s asymmetric ability to inflict costs undermines their bargaining position. As such, Slantchev (2003, 128) writes, “the diminished, or eliminated, capacity to hurt the enemy is a major reason to terminate war and seek a negotiated settlement.” Similarly, Pillar (1983, 59) suggests negotiations begin when “one side demonstrates that it cannot push or punish the enemy beyond a certain point.” Translating this logic to intrastate bargaining, it follows that an asymmetry in the power to hurt favoring rebels should lead to governments seeking compromise.

Terrorism can provide rebels with this asymmetric power to hurt. Specifically, the tactic can be used to gain civilian compliance and deprive the government of such support (Crenshaw 1981; Kalyvas 2004, 2006; Kydd and Walter 2006). When attacks reveal governments are unable or unwilling to protect the population from violence, civilians become more likely to seek protection from rebels, eroding the government’s support base and increasing rebels’ Civilian support is important because it enables belligerents to gain control over territory, and in civil war, maintaining or capturing territory is a measure of success. Terrorism, then, becomes a means for rebels to undermine the government’s control of the state, affording them bargaining power that can be used to attain favorable settlements.

Terrorism offers rebels the power to hurt governments when attacks are targeted, or civilians are selected on an individual basis.7 By launching selective attacks, rebels are able to demonstrate their willingness to impose costs on those cooperating with the government. Unlike states, nonstate actors often possess the knowledge necessary to discriminatingly target individuals, such as local politicians and government supporters, to threaten retribution for collaboration with the state (Bueno de Mesquita and Dickson 2007; Hultman 2009; Kalyvas 2004; Kydd and Walter 2006). Such selective violence can be used to demonstrate the state’s illegitimacy when it fails to provide adequate protection (Hultman 2007, 2009; Kydd and Walter 2006; Wood 2010). When attacks against the population cannot be prevented, rebels demonstrate that the state is not a viable option for protection and, thus, supporting it is without benefit. Thus, civilians concerned with their survival are forced to seek alternate security arrangements, often through rebels.8

As the population supports rebels, both the government’s control and bargaining power are weakened. To this effect, Hultman (2009, 823) suggests, “by destroying the government’s ability to maintain control, and by proving that the state is unable to provide security, a rebel group

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7Terrorism can also be selective when it targets groups suspected of supporting the government.

8Bueno de Mesquita and Dickson (2007) suggest civilians have the option to flee when governments fail to provide protection. If civilians leave, they deprive the government of vital support needed to win in war.
can force the government to back down and offer them concessions."

Governments can lose civilian support when they fail to take actions to protect civilians from rebel violence. State support can also be undermined when terror attacks are used strategically to elicit indiscriminate government reprisals or when utilized as part of a successful provocation strategy (Bueno de Mesquita and Dickson 2007; Crenshaw 1981; Kydd and Walter 2006; Lake 2002; Metelits 2010). Governments are hurt when they are goaded into repressive reactions to terrorism because indiscriminate violence produces collateral damage affecting the entire civilian population. Scholars argue that indiscriminate government responses to terrorism radicalize latent rebel supporters and rival groups alike. The larger the government response to terrorism, the more political moderates shift their positions toward extremists' (Bueno de Mesquita and Dickson 2007; Kydd and Walter 2006; Lake 2002). As extremists' and moderates' attitudes converge, so do their supporters, increasing the extremist organization's base of support.

Excessive government responses to terrorism may also cause individuals who would otherwise support the government to offer support to rebels instead (Goodwin and Skocpol 1989, 493). Kalyvas and Kocher (2007) show that in irregular wars, where both sides employ violence against civilians, individuals will be more likely to comply with actors offering them the greatest chances of survival. As being unaligned is costly, when “faced with a mix of selective violence and protection on one side and indiscriminate violence on the other, most civilians are likely to join the rebels” (Kalyvas and Kocher 2007, 190). Therefore, when used selectively, terrorism can present rebels with an advantage in war.

Although such a response disadvantages them, governments still respond to terrorism indiscriminately when they lack the technology to be more discerning, as it is often too costly an option (Bueno de Mesquita and Dickson 2007; Kalyvas 2004, 2006; Kalyvas and Kocher 2007). As resources thin throughout the course of war, governments should become increasingly less likely to allocate resources necessary to offer discriminating responses. Thus, terrorism is more likely to result in a loss of support for the state and an improvement in the bargaining position of groups utilizing the tactic.

As more civilians cooperate with rebels and the government's grip on control slips, the state should be more willing to search for a peaceful resolution to the conflict.

Bueno de Mesquita and Dickson (2007) argue that the Spanish ETA, the Irgun in Mandate Palestine, the IRA in Northern Ireland, and Hezbollah in Lebanon have all used terror attacks as part of strategies to provoke the state into widespread civilian repression in order to erode their governments’ bases of support. The attacks used by the Irgun, for example, caused the British to offer negotiations and a major concession, the withdrawal from Palestine (Bueno de Mesquita and Dickson 2007, 365), demonstrating that terrorism can offer groups bargaining leverage.

Nigeria provides a more recent example of terrorism offering rebels the power to hurt. Since 2010, Boko Haram has used terrorism to demonstrate the government’s inability to prevent violence and to provoke indiscriminate retaliation largely hurting civilians. In August 2013, for example, the group attacked a mosque, killing 44 people and another 12 nearby. Analysts and officials suggest the act was calculated, as the mosque housed moderate Muslims believed to be supporting the government. The group is thought to have killed thousands of individuals in similar attacks in an attempt to demonstrate that cooperating with the government would be costly.

The state’s response unintentionally furthered the group’s strategy. Not only has the government failed to protect citizens from group attacks, but it has also inflicted large-scale damage on civilians during crackdowns. In July 2013, for instance, the government killed about 200 civilians when it rushed the town of Baga in pursuit of Boko Haram. The United Nations High Commissioner for Refugees (UNHCR) reports that upwards of 7,000 people have fled to neighboring states Niger, Chad, and Cameroon to escape the government’s indiscriminate

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9Bueno de Mesquita and Dickson (2007) also argue that infrastructural damage caused by repressive government responses to terrorism decreases the opportunity cost of participation in war, further increasing support for rebels.

10Terrorism can be counterproductive if indiscriminate or if government responses are selective. Kalyvas (2006) shows that indiscriminate violence by either actor can be counterproductive in contested territories. Scholars argue, however, that rebels often use violence selectively, whereas discriminate violence is often too costly for states to employ (Kalyvas 2004). This supports the notion that rebels have an asymmetric advantage in their ability to use violence against civilians.


attacks. Despite the government acknowledging its responsibility in killing far too many citizens, it has failed to hold soldiers accountable or alter its military strategy.

As a result, Boko Haram’s recruitment has been increasing steadily, and the group controlled nearly 90% of Borno State in July 2013. The United Nations, human rights groups, and governments around the globe have expressed concern over Nigeria’s failure to incorporate the protection of civilians into its counterterrorism policy. After the attacks in Baga, for example, the U.S. Consulate released a statement declaring, “We are deeply concerned about reports of excessive use of force by Nigerian security forces in the name of combating Boko Haram, including extra-judicial killings, prolonged detention and disappearances. . . . We are concerned that such an indiscriminate, force-based approach to counterterrorism is increasing extremism and decreasing confidence in the Federal Government.” As expected, the Nigerian government has made numerous overtures for negotiation to get the group to halt attacks.

Given that terrorism increases rebels’ power to hurt and limits the government’s, groups using the tactic during war, including the Irgun and Boko Haram, should be likely to gain favor in bargaining. As governments’ positions are weakened by terrorism, they should be expected to offer negotiations and attempt to locate peaceful settlements as highlighted in the cases above. This argument produces the following expectations:

$H1$: In civil war, governments should be more likely to offer negotiations to groups when they employ a greater number of terror attacks.

$H2$: In civil war, governments should be more likely to offer concessions to groups when they employ a greater number of terror attacks.

In the next section, I discuss the methods and data used to test this argument. Subsequently, I discuss results from models examining whether governments hold formal talks with rebel groups and the number of concessions governments offer in response to their demands.

Research Methods

A significant contribution of this project is the data on negotiations and concessions used to evaluate gains made by groups in civil war. To my knowledge, the data used here are the most comprehensive data on negotiations and concessions offered to groups engaged in civil war. For this project, I collected information on whether groups participated in negotiations or gained concessions on their demands each month they were involved in armed combat with their government. I began the data collection by identifying 106 African groups in the Uppsala Conflict Data Program (UCDP) dyadic Armed Conflict Dataset (ACD) (Harbom, Melander, and Wallensteen 2008) and recording what each group demanded and what governments offered in response. What results is a dyad-month data set with one observation coded each month rebels and governments are actively fighting.

As collecting data on demands and concessions is both difficult and time consuming, I limited the collection to include only rebel groups from a single region, Africa. Africa is an appropriate region for this study for a number of reasons. First, there is considerable variation in the use of terrorism across groups in the region. Of the 106 groups included in the sample, 45 (42%) are coded as having used terrorism. Second, although terrorism is often thought to be a persistent problem in other regions of the world, the rise of terrorism in Africa has become one of the continent’s foremost security concerns. As the number of groups specializing in the tactic has surged over the last few years, studying terrorism in Africa has become increasingly important. Groups practicing terrorism in countries such as Somalia, Kenya, Uganda, Mali, Libya, Algeria, and Nigeria have threatened regional stability while also posing security threats globally. That Western states, including the United States and France, have begun devoting resources to support counterterrorism in Africa underscores its significance. Similarly, figuring out how to resolve peacefully Africa’s deadly and intractable domestic conflicts has long been an important agenda item for policy makers and academics alike. Thus, studying how terrorism influences conflict resolution in Africa is both timely and consequential.

Although focusing on a single region may influence generalizability, I believe the results garnered with these data have implications beyond Africa. I show below that terror attacks in Africa conform to the global distribution of terrorism. As such, there is a great deal that can be


learned from studying the use of terrorism in Africa’s civil wars.

**Dependent Variables**

To test whether governments are more likely to make peace overtures to organizations wielding the power to hurt, I examine the effect rebel groups’ terror attacks have on two measures of conciliation, negotiations and concessions. Because I am interested in evaluating two different phenomena, the incidence of negotiations and the number of concessions offered, I code two dependent variables. I code whether governments engaged rebels in negotiations in a given month. Negotiations are instances of formal bargaining between the main belligerents in conflict. Negotiations are only coded when both sides of a dyad meet to discuss terms of peace. I do not code back-channel negotiations, or negotiations where third parties act as intermediaries but no formal communication between the warring pair occurs. Although other actors (rebels and mediators) can participate in negotiations, both parties in the main dyad must be represented. The measure is binary. There were 403 cases of negotiation coded using thousands of news sources from Lexis Nexis Academic, information from Keesing’s Contemporary Archives and Jane’s Security and Terrorism Monitor, as well as historical accounts of conflicts. I supplemented this with information from UCDP’s Conflict Encyclopedia (n.d.).

It should be noted that these data do not include secret negotiations. As I use open source information, in most cases, I am unable to capture the onset of clandestine negotiations. While secret negotiations certainly occur and it would be optimal to include them in these data, the use of overt negotiations as a dependent variable is a conservative test of my argument. As governments should be reluctant to negotiate publicly with groups they consider terrorists, they should be much more likely to pursue covert negotiations. Thus, if there is a relationship between negotiations and terrorism, it should be stronger if information on veiled negotiations is considered.

The second dependent variable assesses the volume of concessions governments offer rebels in a month. Concessions are coded when a government addresses, at least in part, something rebels demand in that month. When a demand was announced, I recorded whether and how it was addressed. The government could have ignored or outright rejected the demand. Alternatively, the government could have offered a range of concessions. The most preferred outcome for rebels is a maximal concession, whereas the least preferred is no concession. This scale ranges from 0 to 4.\(^\text{17}\) To generate monthly data, I count the number of concessions governments offer rebels in each month.

To address the concern that rebels’ use of terrorism is more likely to gain only meaningless concessions, I do two things. Based on the aforementioned scale, I first create a measure of concessions, the number of concessions (strong), capturing whether rebels were granted maximal and substantial concessions on their demands. As a robustness check, I also display results with a count of concessions, including moderate, substantial, and maximal concessions (the number of concessions (weak)) in Model 3 in Table 2. While this variable includes more concessions than the strong measure, it still excludes concessions that can be deemed symbolic gestures or those not offering significant changes to the status quo. As the primary response variable, I use the more restrictive measure as I am not only interested in determining whether rebels gain a greater quantity of concessions, but also whether they gain meaningful concessions when they use terrorism. At least one strong concession was recorded in 142 months, with a maximum of eight concessions being granted in a single month.

Second, I recode the dependent variable such that it includes only the number of maximal and substantial political concessions rebels gain (Model 4 of Table 2). This variable differs from the main dependent variable, as it includes only concessions that are political as opposed to those that are tactical or procedural (i.e., change in venue of negotiations). I include this variable as a response to studies demonstrating terrorism only helps groups gain process goals rather than political goals. The variable capturing the number of political concessions excludes concessions on security-related demands as well as demands for food, medicine, and supplies. Due to space constraints, I describe my collection procedures in greater detail and provide descriptive statistics for these data in the supporting information.

**Independent Variables**

I use the Global Terrorism Database (GTD) (START 2012): to identify African groups within the ACD that

\(^{17}\) On this scale, 0 is equal to no concession, 1 denotes minimal concessions, 2 represents moderate concessions, 3 designates substantial concessions, and 4 indicates maximal concessions. Concessions are coded when given in response to rebel demands. Concessions not directly addressing a rebel demand in that month are not coded. Additional information on the coding of these variables appears in the online supporting information.
employ terrorism. The GTD is a suitable measure of terrorism because it facilitates the comparison of my results to other studies examining the effectiveness of terrorism empirically (Abrahms 2012). This ensures that my results do not contrast with those in existing studies only because of a different operational definition of terrorism.\footnote{Findley and Young (2012, 289) assert the GTD is the most comprehensive data source on terrorism, as it contains five times more events than any other data source.}

The GTD records individual instances of terror attacks globally. The GTD records attacks by subnational actors intended to coerce a large audience and/or attain broader social, religious, political, or economic goals. Types of incidents coded in the data set include assassinations, armed assaults, bombings, attacks on facilities, hijackings, and kidnappings. These data include both successful and unsuccessful attempts at domestic and international attacks. Since I am interested in rebels' ability to inflict pain on the domestic government they are fighting, I exclude cases of transnational terrorism and include only successful domestic attacks. Therefore, I include observations where the target and perpetrator are of the same nationality and when attacks are coded as successful. The GTD codes an attack as a success when it causes damage. If a group plants a bomb, for example, and it detonates as planned, causing property damage or casualties, it is successful. If the bomb detonates prematurely or is intercepted before causing damage, it is considered a failure.

Figure 1 compares the distribution of terrorism within African civil wars to domestic attacks outside this context. Specifically, I compare attacks in African civil wars to all attacks in Africa and all attacks outside of Africa. Across all samples, explosions and armed assaults are by far the most prevalent types of attacks, and government officials/assets and civilians are the most frequent targets. That African terrorism seems to conform to global patterns of attacks suggests inferences about terrorism, broadly, can be made using data on African civil wars.\footnote{More information on these comparisons is available in the supporting information.}

The independent variable, the \textit{number of successful terror attacks}, is a count of successful domestic terror attacks executed by a rebel group in a month. I use a
count of attacks because I am interested in testing whether terrorism can weaken governments’ bargaining positions in war. As a single attack does not have the same impact as an accumulation of attacks, I expect the count of attacks to better approximate rebels’ power to hurt. The number of attacks in a month ranges from 0 to 49, where the mean number of successful attacks is 0.36.20

In the analyses presented, the main independent variables are lagged one month. Adding lags is pertinent, as it allows for the testing of whether the outcomes, negotiations, and concessions are actually in response to acts of terrorism.21 It is possible that the effects of rebel tactics are not readily apparent. Governments may need time to recognize how damaging attacks are and may need more than a few weeks to reassess the utility of settlement and reformulate their policies regarding how best to deal with rebel demands. Thus, governments should be as likely to hold negotiations and offer concessions in future months when rebels inflict significant costs on them as they are in the present.

Control Variables

As control variables, I include measures of relative rebel strength, explicit rebel support, and whether rebels are the main group involved in conflict with the government. Strong rebels are much more likely to have the power to hurt than weaker rebel groups. I use the rebel strength variable from Cunningham, Gleditsch, and Salehyan’s (2009) Non-State Actor data set (NSA) to examine the relative power between belligerents in conflict. This is an ordinal variable capturing whether rebels are much weaker than, weaker than, at parity with, or stronger than the government. From this data set, I also include a measure of whether rebels have explicit outside support. If rebel groups have supporters ensuring their viability, they are more likely to have the power to hurt. I also include a measure examining whether a group was the main group inflicting casualties on the government. I coded this variable from the UCDP database listing the number of casualties each group inflicted in a year. If a group caused the greatest number of deaths, it was coded the “main group.” Multiple groups are coded when they inflict similar numbers of casualties in a year.

I include the number of rebel groups to capture the effect multiparty context has on conflict resolution. I include the ln(deaths), as scholars have previously considered the casualty rate a reasonable proxy for expected war costs (Mason and Fett 1996). I took the natural log of the best estimate in the UCDP Battle-Related Deaths Dataset (UCDP 2011). These data include casualties related to fighting between the warring parties, including civilians killed in the cross fire. Episode duration counts, in months, the length of time an episode has been ongoing. I also account for the number of conflict episodes the dyad has experienced. The variables representing episode duration and number of episodes measure how protracted conflict between the dyad is. I include Polity2, a regime type measure from the Polity IV data set (Marshall, Jaggers, and Gurr 2011). I also account for war type by adding measures of territorial war from the UCDP Categorical Variables data set and ethnic war from Cederman, Min, and Wimmer (2010). Third-party mediation comes from the UCDP Categorical Variables data set (1989–2008) and measures whether there were instances of mediation in a given year. From World Bank (2013), I include a measure of gross domestic product (GDP) to account for state capacity.

I use logistic regressions to examine the probability of negotiations because negotiations is a binary variable.22 The results of these analyses are reported in Table 1. Table 2 displays the results of negative binomial regressions examining the count of concessions offered to rebels. I employ negative binomial models because I expect the underlying rate of events (λ) within each period is not constant, as assumed by the Poisson model. In both tables, coefficients and level of significance are reported with robust standard errors clustered on conflict in parentheses.

Results

Table 1 demonstrates that the “power to hurt” argument applies to civil wars. Specifically, it demonstrates that groups using more terror attacks are more likely to negotiate with their governments. Examining Table 1, the 0.1460 coefficient on the number of successful attacks corresponds to a 1.15 increase in the odds of negotiations for each additional terror attack. We expect a group launching one attack to have odds of negotiations 15.7% greater, a group launching two attacks to have odds 34% greater, a group launching three attacks to have odds 45.8% greater, and a group launching four attacks to have odds 62.7% greater. This effect is robust across specifications, including model choice.

20To address concerns about skewness, I display analyses with transformed measures of terrorism as well as alternate measures of terrorism in Tables 3 and 4 in the supporting information.

21To ensure the findings’ robustness, I include in the supporting information models without lags (Tables 3 and 4) and models where terrorism is lagged two and three months (Table 5).

22Models were estimated using Stata 12.1. More information about model choice is included in the supporting information.
TABLE 1 Logistic Regression of the Effect of Terrorism\(_{(t-1)}\) on Negotiations

<table>
<thead>
<tr>
<th>Main Explanatory Variable</th>
<th>Model 1 Negotiations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Successful Terror Attacks(_{(t-1)})</td>
<td>0.1460 (0.04) 0.00</td>
</tr>
<tr>
<td>Control Variable</td>
<td></td>
</tr>
<tr>
<td>Rebel Relative Strength</td>
<td>0.7840 (0.23) 0.00</td>
</tr>
<tr>
<td>Main Group</td>
<td>0.4813 (0.39) 0.22</td>
</tr>
<tr>
<td>Explicit Support</td>
<td>0.7073 (0.39) 0.07</td>
</tr>
<tr>
<td>Regime Type</td>
<td>0.1583 (0.05) 0.00</td>
</tr>
<tr>
<td>In(Deaths)</td>
<td>−0.09253 (0.14) 0.51</td>
</tr>
<tr>
<td>Number of Conflict Episodes</td>
<td>−0.6158 (0.38) 0.11</td>
</tr>
<tr>
<td>Episode Duration</td>
<td>0.005092 (0.00) 0.01</td>
</tr>
<tr>
<td>Territorial War</td>
<td>−0.3393 (0.48) 0.48</td>
</tr>
<tr>
<td>Ethnic War</td>
<td>1.3453 (0.55) 0.01</td>
</tr>
<tr>
<td>Third-Party Mediation</td>
<td>2.1022 (0.47) 0.00</td>
</tr>
<tr>
<td>Number of Rebel Groups</td>
<td>0.2873 (0.19) 0.13</td>
</tr>
<tr>
<td>ln(GDP)</td>
<td>0.5854 (0.17) 0.00</td>
</tr>
<tr>
<td>Constant</td>
<td>−18.949 (4.14) 0.00</td>
</tr>
<tr>
<td>Number of observations</td>
<td>2220</td>
</tr>
</tbody>
</table>

Note: Coefficients, standard errors, and p-values are presented in the first, second, and third rows.

greater, and a group implementing three attacks to have odds 55% greater than groups executing no terror attacks in a month.\(^{23}\) When groups execute 15 attacks in a month, we expect their odds of negotiations to increase by 794%. This is a substantial change showing groups using more attacks are much more likely to be included in negotiations than groups using fewer attacks. Although one attack increases the odds of negotiations for groups in civil war, executing greater numbers of attacks greatly improves the likelihood of government conciliation in the form of negotiations.

Model 1 also illustrates that strong rebels are more likely to be selected for negotiations than weaker rebels. Explicit outside support also improves rebels’ prospects of achieving recognition at the bargaining table. When groups have external backing, the odds of participating in negotiations increase by 102%. More capable and more democratic governments are likely to pursue negotiations with rebels. Formal talks are also more likely to occur when third parties mediate and in ethnic wars.\(^{24}\) Dyads involved in longer conflicts are more likely to negotiate, although the number of prior episodes has no impact on the odds of talks. More intense conflicts are not any more likely to see negotiations, nor are conflicts with more parties nor those fighting territorial wars.

Figure 2 shows the predicted probability of negotiations.\(^{25}\) Figure 2A depicts the effect of terror attacks on the likelihood of negotiations in the next month. When rebels launch no successful terror attacks, the likelihood they participate in negotiations is about 30%. After 10 attacks, the probability they will be invited to negotiations nearly doubles. If they launch roughly 20 successful attacks, the chance of negotiations increases to approximately 88%.\(^{26}\) Figure 2B displays the effect of relative strength on the probability of negotiations.

When rebels are weaker than governments, they can expect to gain negotiations with a 15% probability. At parity, the probability that a dyad will negotiate increases to about 33%, and when rebels are stronger than the government, the probability they negotiate increases to 50%. Finally, Figure 2C exhibits a positive relationship

\(^{23}\)The percentage change in odds is calculated by the following equation: \(100\exp(\beta x) - 1\), where \(\beta\) is the coefficient and \(x\) is the unit change in \(\beta\), the number of terror attacks.

\(^{24}\)As mediation is coded by year, the results examine the effect of third-party involvement in that year, on the probability that negotiations occur in a given month.

\(^{25}\)Predicted probabilities are calculated with all control variables set at their means. 95% confidence intervals surround predictions.

\(^{26}\)Confidence bands widen as the number of attacks increase because there are fewer cases where rebels launch large numbers of successful attacks than where they launch no attacks.
Table 2  Negative Binomial Regressions of the Effect of Terrorism_{(t−1)} on Concessions

<table>
<thead>
<tr>
<th>Main Explanatory Variable</th>
<th>Model 2 Number of Concessions (Strong)</th>
<th>Model 3 Number of Concessions (Weak)</th>
<th>Model 4 Number of Political Concessions (Strong)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Successful Terror Attacks_{(t−1)}</td>
<td>0.06371 (0.01)</td>
<td>0.06613 (0.01)</td>
<td>0.04417 (0.01)</td>
</tr>
<tr>
<td>Control Variables</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rebel Relative Strength</td>
<td>1.0881 (0.33)</td>
<td>1.0070 (0.30)</td>
<td>0.9789 (0.32)</td>
</tr>
<tr>
<td>Main Group</td>
<td>1.0881 (0.33)</td>
<td>1.0070 (0.30)</td>
<td>0.9789 (0.32)</td>
</tr>
<tr>
<td>Explicit Support</td>
<td>0.93 (0.50)</td>
<td>0.67 (0.47)</td>
<td>0.85 (0.58)</td>
</tr>
<tr>
<td>Regime Type</td>
<td>0.67 (0.44)</td>
<td>0.46 (0.43)</td>
<td>0.68 (0.48)</td>
</tr>
<tr>
<td>In(Deaths)</td>
<td>0.09374 (0.09)</td>
<td>0.07405 (0.08)</td>
<td>0.02334 (0.08)</td>
</tr>
<tr>
<td>Number of Conflict Episodes</td>
<td>−0.4567 (0.24)</td>
<td>−0.5448 (0.26)</td>
<td>−1.4562 (0.52)</td>
</tr>
<tr>
<td>Episode Duration</td>
<td>0.06 (0.06)</td>
<td>0.04 (0.04)</td>
<td>0.01 (0.01)</td>
</tr>
<tr>
<td>Third-Party Mediation</td>
<td>1.0879 (0.61)</td>
<td>1.2474 (0.59)</td>
<td>1.3421 (0.50)</td>
</tr>
<tr>
<td>Territorial War</td>
<td>0.08 (0.08)</td>
<td>0.04 (0.04)</td>
<td>0.01 (0.01)</td>
</tr>
<tr>
<td>Ethnic War</td>
<td>0.985 (0.86)</td>
<td>0.3242 (0.78)</td>
<td>0.9583 (0.97)</td>
</tr>
<tr>
<td>Number of Rebel Groups</td>
<td>0.63 (0.83)</td>
<td>0.37 (0.68)</td>
<td>0.32 (0.52)</td>
</tr>
<tr>
<td>ln(GDP)</td>
<td>0.1077 (0.25)</td>
<td>−0.1136 (0.20)</td>
<td>0.05087 (0.25)</td>
</tr>
<tr>
<td>ln(alpha)</td>
<td>0.3061 (0.18)</td>
<td>0.3432 (0.18)</td>
<td>0.2577 (0.19)</td>
</tr>
<tr>
<td>Constant</td>
<td>−13.517 (4.53)</td>
<td>−14.281 (4.35)</td>
<td>−12.018 (4.69)</td>
</tr>
<tr>
<td>Ln(alpha)</td>
<td>2.1510 (0.27)</td>
<td>1.6779 (0.34)</td>
<td>2.0117 (0.34)</td>
</tr>
<tr>
<td>Number of observations</td>
<td>2220</td>
<td>2220</td>
<td>2220</td>
</tr>
</tbody>
</table>

Note: Coefficients, standard errors, and p-values are presented in the first, second, and third rows.

between the length of an episode and the probability of negotiations. At about four years of sustained violence, the probability of a dyad negotiating is about 25%. The chance of negotiations increases to about 35% when the conflict has been ongoing for eight years. Although episode duration and rebel strength are both associated with increases in the likelihood of negotiations, the number of terror attacks has a greater effect on the probability negotiations occur. Whereas rebels stronger than their governments and dyads in conflict for 12.5 years can
expect to hold formal talks with a probability of 0.50, talks are just as likely to occur when rebels execute only six attacks.

Table 2 examines how the volume of attacks affects the number of concessions.\textsuperscript{27} Model 2 demonstrates that groups using more terrorism in civil war are likely to gain a greater number of moderate and substantial concessions on their demands. That more attacks lead to more concessions supports the second hypothesis. Model 3 shows similarly that more attacks are associated with more concessions, even when the measure of concessions is more inclusive. When the measure of concessions is restricted to include only political concessions and excludes process goals, more terror attacks are still associated with greater concessions on rebel demands. These results are displayed in Model 4.

Like the odds ratio, the incidence rate ratio, or relative change in incidence rate for a one-unit change in an explanatory variable, can be calculated by exponentiating the coefficient ($\beta$). Based on Model 2, the incidence rate of concessions for a group using one terror attack in the prior month is 1.06 times that of a group executing no attacks. A group launching five attacks has an incidence rate of 1.38, whereas a group employing 10 terror attacks has a rate of 1.89. This can be interpreted as groups executing five attacks have a rate of concessions about 1.38 times that of groups waging no attacks, groups launching 10 attacks are likely to gain concessions at a rate of almost two times that of groups using no terror attacks, and groups using 20 attacks are likely to gain concessions at a rate more than three times higher than groups using no terrorism. This suggests significant gains for groups adopting the tactic of terrorism.

Relatively strong rebels—those involved in severe conflicts, mediated conflicts, and conflicts with more capable governments—are likely to see more concessions. While rebels in particularly long conflicts are more likely to receive government offers, groups having engaged in multiple rounds of conflict with their governments are likely to see fewer concessions. Although explicit backing is useful in gaining an invitation to the bargaining table (as shown in Table 1), such support does not increase the chance rebels will gain more concessions. Similarly, even though democratic governments are more likely to negotiate, negotiations are not more likely to lead to more

\textsuperscript{27}Graphs illustrating substantive effects for Model 2 appear in the supporting information.
concessions. The type of war bears no influence on the number of concessions offered.

Discussion

The aim of this article is to uncover whether terrorism is effective during civil wars. I present a theoretical account explaining why acts of terrorism should be related to government compromise during these conflicts. Terrorism offers dissident groups the power to hurt while simultaneously denying governments the power to hurt them back. Governments’ violent response to terrorism drives political moderates and civilians toward extremists, whereas their inability to prevent violence prompts civilians to seek protection from nonstate actors. Increased civilian support enlarges rebels’ power to hurt while decreasing the state’s. In a similar way, acts of terrorism undermine the state’s power to hurt, as they are often unable to target those directly responsible for violence. Governments are disadvantaged when they respond to violence indiscriminately or not at all, gaining groups employing violence an advantage. Terror attacks during civil war, then, should be associated with an increase in the probability of negotiations and rate of concessions. Using new data on concessions and negotiations in African civil conflicts, I demonstrate more terror attacks significantly increase the probability that groups will participate in negotiations and gain more concessions in months following attacks.

The findings in this article diverge from those in other studies examining the effectiveness of terrorism. This study suggests attacks against noncombatants prompt conciliation when used within war, whereas Abrahms (2012) suggests attacks occurring outside of war do not have that effect. Abrahms’ and my results may differ because we examine different types of cases. Abrahms (2012, 371) excludes “groups involved in protracted civil wars of attrition,” as he believes they are conceptually distinct phenomena from terrorist campaigns. I do not assume domestic terrorism in civil war is drastically different from domestic terrorism occurring outside of civil war, but I acknowledge that this could possibly account for our disparate results. While mine are restricted to only domestic terrorism, Abrahms’ (2012) data also include groups using transnational terrorism.

In addition to contributing to the literature on the effectiveness of terrorism, this article also examines the determinants of concessions. Very few studies consider empirically factors that influence whether groups gain concessions in civil wars. Cunningham’s (2011) is one such study that does assess the effect of group-level factors on concessions, although she is mainly concerned with whether violent and nonviolent self-determination movements gain concessions when they are divided or unified. Cunningham examines whether violence affects concessions and finds groups using violence are more likely to gain concessions only in the year the civil war begins. Other measures of violence, including whether there is conflict in the previous year and whether violence is ever used, do not appear to explain government concessions. These diverge from my results in that I find more violence prompts government concessions, particularly when violence is conceptualized as terrorism. While the initial onslaught of violence seems to predict concessions in Cunningham’s models, I expect sustained violence to be responsible for inducing concessions.

Additionally, this article contributes to the literature on conflict resolution in civil war by examining what determines when parties negotiate. Although a few scholars have considered what influences the decision to hold negotiations in intrastate conflict (Bapat 2005; Mason and Fett 1996; Pillar 1983), only one other study does so empirically. We know from Bapat (2005) that the length of conflict influences negotiation onset, but few other factors have been examined. As this study examines a variety of factors influencing whether dyads negotiate, it is a significant contribution that has implications for other studies on civil war conflict resolution. Although there are cases of agreements without negotiations, it is nevertheless a highly unlikely trajectory for the road to peace. That agreements often occur after negotiations have been initiated suggests there is a systematic element to the process generating data on formal agreements. If whether belligerents sign agreements is conditional on whether they first negotiate, selection bias is likely to affect studies examining whether peace agreements are reached. As such bias can lead to incorrect inferences, determining whether there is a systematic component to negotiations and accounting for it in models examining agreements is prudent and should be the focus of future study.

Finally, although the argument is tested on a sample composed of only African rebel groups, there is no reason to expect the results will not hold outside of the region. While Africa may be more likely to experience civil war, the region is no more likely to see terrorism during these conflicts than other regions (Findley and Young 2012). As such, acts of terrorism should also explain when governments offer negotiations and concessions in other regions. This, too, should be the subject of future inquiry.
References


**Supporting Information**

Additional Supporting Information may be found in the online version of this article at the publisher’s website:

- **Section I**: Measurement of Concessions
- **Section II**: Descriptive Statistics
- **Section III**: Additional Statistical Analyses